

## **SUPPLEMENTAL MATERIAL**

### **TITLE : Identification of binding sites contributing to volatile anesthetic effects on $\gamma$ -aminobutyric acid type A receptors**

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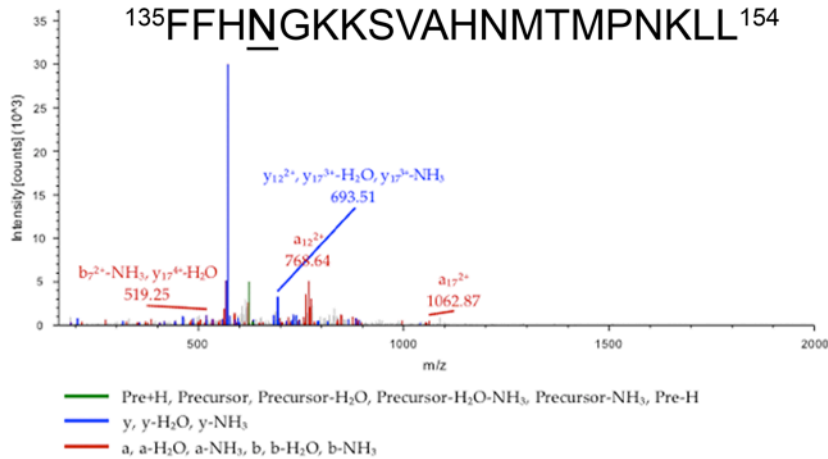
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Table S1. Azidoflurane photolabeled residues in FLAG- $\alpha_1\beta_3$  and FLAG- $\alpha_1\beta_3\gamma_2$ -L3-1D4 GABA<sub>A</sub> receptors and corresponding residues within  $\alpha_1\beta_3$  and  $\alpha_1\beta_3\gamma_2$  GABA<sub>A</sub> receptors.

<b><math>\alpha\beta</math> GABA<sub>A</sub> receptor</b>		
Subunit	FLAG- $\alpha_1\beta_3$ Residue #	$\alpha_1\beta_3$ Residue #
$\alpha$	N138	N103
	T265	T230
	I274	I239
	L275	L240
	V286	V251
	I306	I271
	S307	S272
$\beta$	A70	A45
	V315	V290
	T291	T266
<b><math>\alpha\beta\gamma</math> GABA<sub>A</sub> receptor</b>		
Subunit	FLAG- $\alpha_1\beta_3\gamma_2$ -L3-1D4 Residue #	$\alpha_1\beta_3\gamma_2$ Residue #
$\alpha$	E285	E250
	S311	S276
	P313	P278
$\beta$	I247	I222
	Q249	Q224
	Y251	Y226
	I280	I255
	I289	I264
$\gamma$	Y280	Y241

Table S2. Azisevoflurane photolabeled residues in FLAG- $\alpha_1\beta_3$  and FLAG- $\alpha_1\beta_3\gamma_{2L}$ -L3-1D4 GABA<sub>A</sub> receptors and corresponding residues within  $\alpha_1\beta_3$  and  $\alpha_1\beta_3\gamma_2$  GABA<sub>A</sub> receptors.

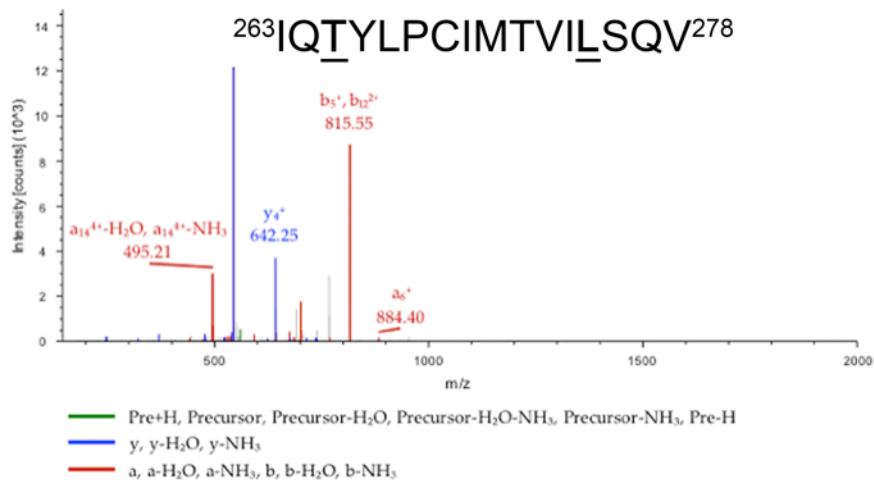
<b><math>\alpha\beta</math> GABA<sub>A</sub> receptor</b>		
Subunit	FLAG- $\alpha_1\beta_3$ Residue #	$\alpha_1\beta_3$ Residue #
$\alpha$	G139	G104
	C269	C234
	P288	P253
	V292	V257
$\beta$	E204	E179
	P209	P184
	W266	W241
	A274	T255
	T280	A249
	L442	L417
<b><math>\alpha\beta\gamma</math> GABA<sub>A</sub> receptor</b>		
Subunit	FLAG- $\alpha_1\beta_3\gamma_{2L}$ -L3-1D4 Residue #	$\alpha_1\beta_3\gamma_2$ Residue #
$\alpha$	S276	S241
	R290	R255
	V295	V260
	T296	T261
	T300	T265
$\beta$	A273	A248
$\gamma$	L307	L268
	G308	G269



#1	a <sup>+</sup>	a <sup>2+</sup>	a <sup>3+</sup>	a <sup>4+</sup>	b <sup>+</sup>	b <sup>2+</sup>	b <sup>3+</sup>	b <sup>4+</sup>	Seq.	y <sup>+</sup>	y <sup>2+</sup>	y <sup>3+</sup>	y <sup>4+</sup>	#2
1	120.08	60.54	40.70	30.78	148.08	74.54	50.03	37.77	F					20
2	267.15	134.08	89.72	67.54	295.14	148.08	99.05	74.54	F	2379.09	1190.05	<b>793.70</b>	595.53	19
3	404.21	202.61	135.41	101.81	432.20	<b>216.61</b>	144.74	108.81	H	2232.02	1116.52	<b>744.68</b>	<b>558.76</b>	18
4	<b>714.22</b>	357.61	238.75	179.31	<b>742.22</b>	<b>371.61</b>	248.08	186.31	N-Azilso	2094.97	1047.99	<b>698.99</b>	524.50	17
5	<b>771.24</b>	386.13	257.75	193.57	799.24	400.12	267.08	200.57	G	1784.95	<b>892.98</b>	<b>595.66</b>	446.99	16
6	899.34	450.17	300.45	225.59	927.33	464.17	309.78	232.59	K	1727.93	<b>864.47</b>	<b>576.65</b>	432.74	15
7	1027.43	514.22	343.15	257.61	<b>1055.43</b>	528.22	352.48	264.61	K	1599.83	800.42	<b>533.95</b>	400.71	14
8	1114.47	<b>557.74</b>	<b>372.16</b>	279.37	1142.46	<b>571.73</b>	381.49	286.37	S	1471.74	736.37	491.25	368.69	13
9	1213.53	607.27	<b>405.18</b>	304.14	1241.53	<b>621.27</b>	414.51	311.14	V	1384.71	<b>692.86</b>	<b>462.24</b>	346.93	12
10	1284.57	642.79	428.86	321.90	1312.57	<b>656.79</b>	438.19	328.90	A	1285.64	643.32	429.22	322.17	11
11	1421.63	711.32	474.55	<b>356.16</b>	1449.63	<b>725.32</b>	<b>483.88</b>	363.16	H	1214.60	607.80	<b>405.54</b>	304.41	10
12	1535.67	<b>768.34</b>	512.56	<b>384.67</b>	1563.67	<b>782.34</b>	521.89	391.67	N	1077.54	539.28	359.85	270.14	9
13	1666.71	833.86	556.24	<b>417.43</b>	1694.71	<b>847.86</b>	<b>565.57</b>	424.43	M	963.50	482.25	321.84	241.63	8
14	1767.76	<b>884.38</b>	589.93	<b>442.70</b>	1795.76	<b>898.38</b>	<b>599.26</b>	449.69	T	832.46	<b>416.73</b>	278.16	208.87	7
15	1914.80	957.90	638.94	<b>479.45</b>	1942.79	971.90	<b>648.27</b>	<b>486.45</b>	M-Oxidation	<b>731.41</b>	366.21	244.48	183.61	6
16	2011.85	1006.43	671.29	<b>503.72</b>	2039.84	1020.43	680.62	510.72	P	584.38	292.69	195.46	146.85	5
17	2125.89	<b>1063.45</b>	709.30	<b>532.23</b>	2153.89	1077.45	<b>718.63</b>	539.23	N	<b>487.32</b>	244.17	163.11	122.59	4
18	2253.99	1127.50	752.00	<b>564.25</b>	2281.98	1141.49	<b>761.33</b>	<b>571.25</b>	K	373.28	187.14	125.10	94.08	3
19	2367.07	1184.04	<b>789.70</b>	<b>592.52</b>	2395.07	1198.04	799.03	<b>599.52</b>	L	245.19	123.10	82.40	62.05	2
20									L	132.10	66.55	44.71	33.78	1

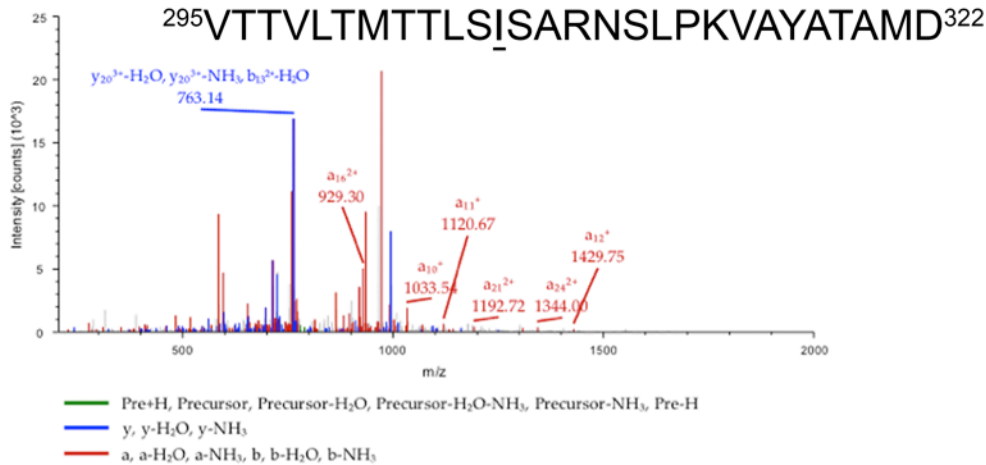
Fig S1. Identification of aziisoflurane adduct within the FLAG- $\alpha_1$  subunit of FLAG- $\alpha_1\beta_3$  GABA<sub>A</sub> receptor photolabeled in the presence of 30  $\mu$ M aziisoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing aziisoflurane  $\alpha$ 1-N138 adduct. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.





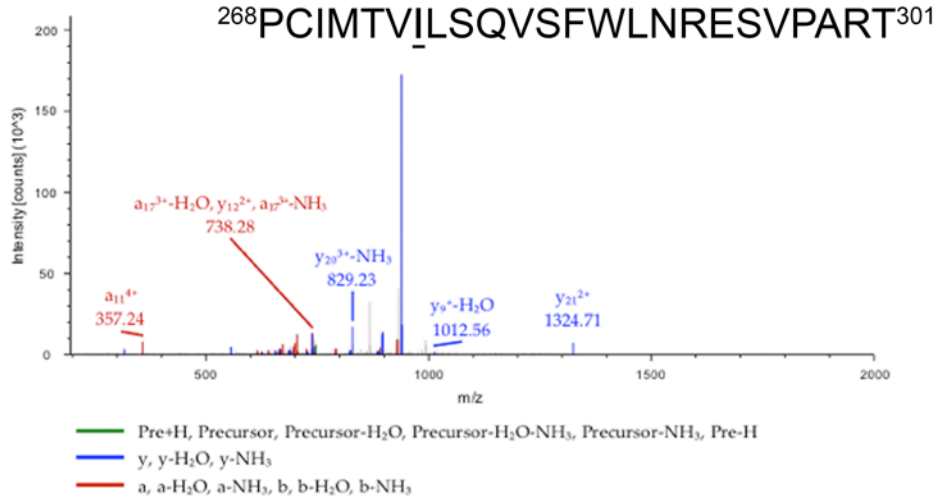
#1	a <sup>+</sup>	a <sup>2+</sup>	a <sup>3+</sup>	a <sup>4+</sup>	b <sup>+</sup>	b <sup>2+</sup>	b <sup>3+</sup>	b <sup>4+</sup>	Seq.	y <sup>+</sup>	y <sup>2+</sup>	y <sup>3+</sup>	y <sup>4+</sup>	#2
1	86.10	43.55	29.37	22.28	114.09	57.55	38.70	29.28	I					16
2	214.16	107.58	72.06	54.29	242.15	121.58	81.39	61.29	Q	2157.87	1079.44	719.96	<u>540.22</u>	15
3	511.17	256.09	171.06	128.55	539.17	270.09	180.39	135.55	T-Azilso	2029.81	1015.41	<u>677.27</u>	508.21	14
4	674.24	337.62	225.42	169.31	<u>702.23</u>	351.62	234.75	176.31	Y	1732.79	866.90	578.27	433.95	13
5	787.32	394.16	263.11	197.59	<u>815.32</u>	408.16	272.44	204.58	L	1569.72	785.37	<u>523.91</u>	393.19	12
6	<u>884.37</u>	<u>442.69</u>	295.46	221.85	912.37	456.69	304.79	228.85	P	1456.64	728.82	486.22	364.92	11
7	1044.40	<u>522.71</u>	348.81	261.86	1072.40	<u>536.70</u>	358.14	268.86	C-Carbamidomethyl	1359.59	680.30	453.87	340.65	10
8	1157.49	579.25	386.50	290.13	1185.48	<u>593.25</u>	395.83	297.13	I	1199.56	600.28	400.52	300.64	9
9	1288.53	<u>644.77</u>	430.18	322.89	1316.52	658.77	439.51	329.89	M	1086.47	<u>543.74</u>	362.83	272.37	8
10	1389.58	695.29	463.86	348.15	1417.57	709.29	<u>473.20</u>	355.15	T	955.43	<u>478.22</u>	319.15	239.61	7
11	1488.65	744.83	<u>496.89</u>	372.92	1516.64	758.82	506.22	379.92	V	854.38	427.70	285.47	214.35	6
12	1601.73	801.37	534.58	401.19	1629.72	<u>815.37</u>	<u>543.91</u>	408.19	I	755.32	378.16	252.44	189.58	5
13	1910.79	955.90	637.60	<u>478.45</u>	1938.78	969.89	646.93	485.45	L-Azilso	<u>642.23</u>	<u>321.62</u>	214.75	161.31	4
14	1997.82	999.41	666.61	500.21	2025.81	1013.41	<u>675.94</u>	507.21	S	333.18	167.09	111.73	84.05	3
15	2125.88	1063.44	709.30	<u>532.22</u>	2153.87	1077.44	718.63	539.22	Q	246.14	123.58	82.72	62.29	2
16									V	118.09	59.55	40.03	30.28	1

Fig S2. Identification of aziisoflurane adduct within the FLAG- $\alpha_1$  subunit of FLAG- $\alpha_1\beta_3$  GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu\text{M}$  aziisoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing aziisoflurane  $\alpha_1$ -T265/ $\alpha_1$ -L275 adduct. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.



#1	a*	a <sup>2+</sup>	a <sup>3+</sup>	a <sup>4+</sup>	b*	b <sup>2+</sup>	b <sup>3+</sup>	b <sup>4+</sup>	Seq.	y*	y <sup>2+</sup>	y <sup>3+</sup>	y <sup>4+</sup>	#2
1	72.08	36.54	24.70	18.78	100.08	50.54	34.03	25.77	V					28
2	173.13	87.07	58.38	44.04	201.12	101.07	67.71	51.04	T	3053.44	1527.22	1018.48	<b><u>764.12</u></b>	27
3	274.18	137.59	92.06	69.30	302.17	151.59	101.40	76.30	T	2952.39	1476.70	<b><u>984.80</u></b>	<b><u>738.85</u></b>	26
4	373.24	187.13	125.09	94.07	<b><u>401.24</u></b>	201.12	134.42	101.07	V	2851.34	1426.18	951.12	<b><u>713.59</u></b>	25
5	486.33	243.67	162.78	122.34	514.32	257.67	172.11	129.34	L	2752.28	1376.64	<b><u>918.10</u></b>	688.82	24
6	<b><u>587.38</u></b>	<b><u>294.19</u></b>	196.46	147.60	615.37	308.19	205.80	154.60	T	2639.19	1320.10	<b><u>880.40</u></b>	<b><u>660.55</u></b>	23
7	<b><u>718.42</u></b>	359.71	240.14	180.36	746.41	373.71	249.48	187.36	M	2538.14	1269.58	846.72	635.29	22
8	<b><u>819.46</u></b>	<b><u>410.24</u></b>	273.83	205.62	847.46	424.23	283.16	212.62	T	2407.10	1204.06	<b><u>803.04</u></b>	<b><u>602.53</u></b>	21
9	<b><u>920.51</u></b>	<b><u>460.76</u></b>	307.51	230.88	948.51	474.76	316.84	237.88	T	2306.06	1153.53	<b><u>769.36</u></b>	577.27	20
10	<b><u>1033.60</u></b>	<b><u>517.30</u></b>	345.20	259.15	1061.59	<b><u>531.30</u></b>	354.54	266.15	L	2205.01	<b><u>1103.01</u></b>	<b><u>735.67</u></b>	<b><u>552.01</u></b>	19
11	<b><u>1120.63</u></b>	<b><u>560.82</u></b>	374.21	280.91	1148.62	574.82	<b><u>383.55</u></b>	287.91	S	2091.92	1046.47	<b><u>697.98</u></b>	523.74	18
12	<b><u>1429.68</u></b>	715.35	477.23	358.18	1457.68	729.34	486.56	365.18	I-Azifluoro	2004.89	1002.95	<b><u>668.97</u></b>	<b><u>501.98</u></b>	17
13	1516.72	<b><u>758.86</u></b>	506.24	379.93	1544.71	<b><u>772.86</u></b>	<b><u>515.58</u></b>	386.93	S	1695.84	<b><u>848.42</u></b>	<b><u>565.95</u></b>	424.71	16
14	1587.75	794.38	<b><u>529.92</u></b>	<b><u>397.69</u></b>	1615.75	808.38	539.25	404.69	A	1608.81	<b><u>804.91</u></b>	536.94	<b><u>402.96</u></b>	15
15	1743.85	872.43	581.96	436.72	1771.85	<b><u>886.43</u></b>	591.29	443.72	R	1537.77	<b><u>769.39</u></b>	513.26	385.20	14
16	1858.88	<b><u>929.94</u></b>	620.30	465.48	1886.88	<b><u>943.94</u></b>	<b><u>629.63</u></b>	472.47	N-Deamidated	1381.67	<b><u>691.34</u></b>	<b><u>461.23</u></b>	346.17	13
17	1945.91	<b><u>973.46</u></b>	<b><u>649.31</u></b>	487.23	1973.91	987.46	<b><u>658.64</u></b>	<b><u>494.23</u></b>	S	1266.64	<b><u>633.82</u></b>	422.88	317.42	12
18	2059.00	<b><u>1030.00</u></b>	<b><u>687.00</u></b>	<b><u>515.50</u></b>	2086.99	1044.00	<b><u>696.34</u></b>	<b><u>522.50</u></b>	L	1179.61	<b><u>590.31</u></b>	393.87	295.66	11
19	2156.05	1078.53	<b><u>719.35</u></b>	539.77	2184.04	1092.53	<b><u>728.69</u></b>	<b><u>546.77</u></b>	P	<b><u>1066.52</u></b>	533.77	356.18	267.39	10
20	2284.14	<b><u>1142.58</u></b>	<b><u>762.05</u></b>	571.79	2312.14	1156.57	<b><u>771.38</u></b>	578.79	K	<b><u>969.47</u></b>	<b><u>485.24</u></b>	<b><u>323.83</u></b>	243.12	9
21	2383.21	<b><u>1192.11</u></b>	795.08	<b><u>596.56</u></b>	2411.21	1206.11	<b><u>804.41</u></b>	<b><u>603.56</u></b>	V	<b><u>841.38</u></b>	<b><u>421.19</u></b>	281.13	211.10	8
22	2454.25	1227.63	<b><u>818.75</u></b>	614.32	2482.25	1241.63	828.09	621.32	A	742.31	<b><u>371.66</u></b>	248.11	186.33	7
23	2617.31	<b><u>1309.16</u></b>	<b><u>873.11</u></b>	<b><u>655.08</u></b>	2645.31	1323.16	<b><u>882.44</u></b>	662.08	Y	<b><u>671.27</u></b>	336.14	224.43	168.57	6
24	2688.35	<b><u>1344.68</u></b>	<b><u>896.79</u></b>	<b><u>672.84</u></b>	2716.35	1358.68	<b><u>906.12</u></b>	<b><u>679.84</u></b>	A	<b><u>508.21</u></b>	254.61	170.07	127.81	5
25	2789.40	1395.20	930.47	<b><u>698.11</u></b>	2817.39	1409.20	<b><u>939.80</u></b>	<b><u>705.10</u></b>	T	<b><u>437.17</u></b>	219.09	146.39	110.05	4
26	2860.44	1430.72	954.15	<b><u>715.86</u></b>	2888.43	1444.72	<b><u>963.48</u></b>	<b><u>722.86</u></b>	A	336.12	168.56	112.71	84.79	3
27	2991.48	1496.24	997.83	<b><u>748.62</u></b>	3019.47	1510.24	<b><u>1007.16</u></b>	755.62	M	265.09	133.05	89.03	67.03	2
28									D	134.04	67.53	45.35	34.27	1

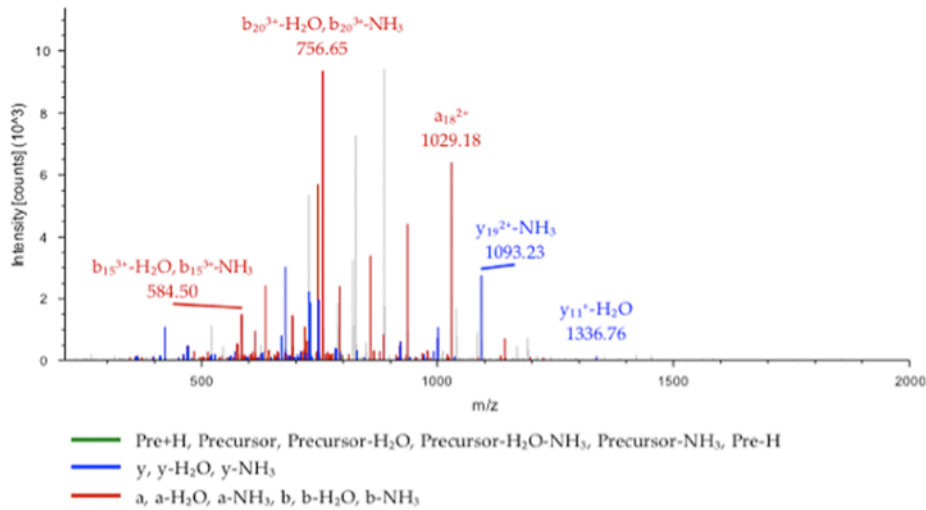
Fig S3.. Identification of aziisoflurane adduct within the FLAG- $\alpha_1$  subunit of FLAG- $\alpha_1\beta_3$  GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu$ M aziisoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing aziisoflurane  $\alpha_1$ -I306 adduct. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.



#1	a <sup>+</sup>	a <sup>2+</sup>	a <sup>3+</sup>	a <sup>4+</sup>	b <sup>+</sup>	b <sup>2+</sup>	b <sup>3+</sup>	b <sup>4+</sup>	Seq.	y <sup>+</sup>	y <sup>2+</sup>	y <sup>3+</sup>	y <sup>4+</sup>	#2
1	70.07	35.54	24.03	18.27	98.06	49.53	33.36	25.27047	P					24
2	230.10	115.55	77.37	58.28	258.09	129.55	86.70	65.27813	C-Carbamidomethyl	2921.34	1461.17	974.45	731.09	23
3	343.18	172.09	115.06	86.55	371.17	186.09	124.40	93.54915	I	2761.31	1381.16	921.11	<b>691.08</b>	22
4	490.22	245.61	164.08	123.31	518.21	259.61	173.41	130.308	M-Oxidation	2648.23	<b>1324.62</b>	<b>883.41</b>	662.81	21
5	591.26	296.14	197.76	148.57	619.26	310.13	207.09	155.56992	T	2501.19	1251.10	834.40	<b>626.05</b>	20
6	690.33	345.67	230.78	173.34	718.33	359.67	240.11	180.33703	V	2400.14	1200.57	800.72	600.79	19
7	999.39	500.20	333.80	250.60	1027.38	514.19	343.13	257.6009	I-Aziso	2301.07	1151.04	767.70	576.02	18
8	1112.47	556.74	371.50	278.87	1140.47	570.74	380.83	285.87192	L	1992.02	996.51	<b>664.68</b>	498.76	17
9	1199.50	600.26	400.51	300.63	1227.50	614.25	409.84	307.62993	S	1878.93	<b>939.97</b>	626.98	470.49	16
10	1328.55	<b>664.78</b>	443.52	332.89	1356.54	678.77	452.85	339.89058	Q-Deamidated	1791.90	<b>896.45</b>	597.97	448.73	15
11	1427.61	714.31	476.54	<b>357.66</b>	1455.61	728.31	485.87	364.65768	V	1662.86	831.93	<b>554.96</b>	416.47	14
12	1514.65	757.83	505.55	379.42	1542.64	771.82	514.89	386.41569	S	1563.79	782.40	521.94	391.70	13
13	1661.71	831.36	554.58	416.18	1689.71	845.36	563.91	423.1828	F	1476.76	<b>738.88</b>	492.92	369.95	12
14	1847.79	924.40	616.60	462.70	1875.79	938.40	<b>625.93</b>	469.70263	W	1329.69	<b>665.35</b>	443.90	333.18	11
15	1960.88	980.94	654.30	490.97	1988.87	994.94	663.63	497.97364	L	1143.61	572.31	381.88	286.66	10
16	2075.90	1038.46	692.64	519.73	2103.90	1052.45	701.97	526.73038	N-Deamidated	1030.53	515.77	344.18	258.39	9
17	2232.01	1116.51	<b>744.67</b>	558.76	2260.00	1130.50	754.01	565.75566	R	915.50	458.25	305.84	229.63	8
18	2361.05	1181.03	787.69	591.02	2389.04	1195.03	797.02	598.01631	E	759.40	380.20	253.80	190.61	7
19	2448.08	1224.54	816.70	612.78	2476.08	1238.54	826.03	619.77432	S	630.36	<b>315.68</b>	210.79	158.34	6
20	2547.15	1274.08	849.72	637.54	2575.14	1288.08	859.05	644.54142	V	543.32	272.17	181.78	136.59	5
21	2644.20	1322.60	882.07	<b>661.81</b>	2672.20	1336.60	<b>891.40</b>	<b>668.80462</b>	P	444.26	222.63	148.76	111.82	4
22	2715.24	1358.12	905.75	679.57	2743.23	1372.12	915.08	<b>686.5639</b>	A	347.20	174.11	116.41	87.56	3
23	2871.34	1436.17	957.78	718.59	2899.33	1450.17	967.12	<b>725.58918</b>	R	276.17	138.59	92.73	69.80	2
24									T	120.07	60.54	40.69	30.77	1

Fig S4. Identification of aziisoflurane adduct within the FLAG- $\alpha_1$  subunit of FLAG- $\alpha_1\beta_3$  GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu$ M aziisoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing aziisoflurane  $\alpha_1$ -I274 adduct. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.

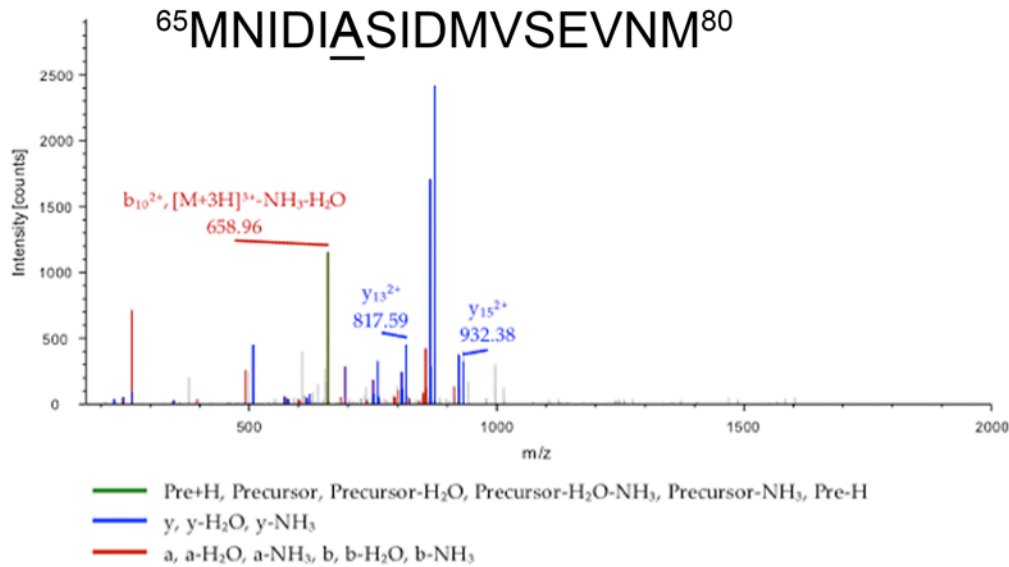
<sup>286</sup>VPARTVFGVTTVLTMTTLSISARNSLP<sup>313</sup>



#1	a <sup>+</sup>	a <sup>2+</sup>	a <sup>3+</sup>	a <sup>4+</sup>	b <sup>+</sup>	b <sup>2+</sup>	b <sup>3+</sup>	b <sup>4+</sup>	Seq.	y <sup>+</sup>	y <sup>2+</sup>	y <sup>3+</sup>	y <sup>4+</sup>	#2
1	268.05	134.53	90.02	67.77	296.05	148.53	99.35	74.77	V-Azilso					27
2	<u>365.10</u>	183.06	122.37	92.03	393.10	197.05	131.70	99.03	P	2929.47	1465.24	<u>977.16</u>	<u>733.12</u>	26
3	436.14	218.57	146.05	109.79	464.14	232.57	155.38	116.79	A	2832.42	1416.71	944.81	<u>708.86</u>	25
4	<u>592.24</u>	296.63	198.09	148.82	620.24	310.62	207.42	155.81	R	2761.38	1381.19	<u>921.13</u>	691.10	24
5	<u>693.29</u>	<u>347.15</u>	231.77	174.08	<u>721.29</u>	361.15	241.10	181.08	T	2605.28	1303.14	869.10	652.07	23
6	<u>792.36</u>	<u>396.68</u>	264.79	198.85	820.35	<u>410.68</u>	274.12	205.84	V	2504.23	1252.62	835.41	<u>626.81</u>	22
7	939.43	<u>470.22</u>	313.81	235.61	<u>967.42</u>	<u>484.21</u>	323.15	242.61	F	2405.16	1203.08	802.39	602.05	21
8	996.45	498.73	332.82	249.87	1024.44	<u>512.73</u>	342.15	256.87	G	2258.09	1129.55	753.37	565.28	20
9	1095.52	548.26	<u>365.84</u>	274.63	1123.51	<u>562.26</u>	375.18	281.63	V	2201.07	1101.04	<u>734.36</u>	551.02	19
10	<u>1196.57</u>	<u>598.79</u>	399.53	299.90	<u>1224.56</u>	<u>612.78</u>	408.86	306.90	T	2102.00	1051.51	<u>701.34</u>	526.26	18
11	1297.61	649.31	433.21	325.16	1325.61	<u>663.31</u>	442.54	332.16	T	2000.96	<u>1000.98</u>	667.66	500.99	17
12	1396.68	698.84	466.23	349.93	1424.68	<u>712.84</u>	475.56	356.92	V	1899.91	950.46	633.97	475.73	16
13	1509.77	755.39	<u>503.93</u>	378.20	1537.76	769.38	<u>513.26</u>	385.20	L	1800.84	900.92	600.95	<u>450.97</u>	15
14	1610.81	805.91	537.61	403.46	1638.81	819.91	546.94	<u>410.46</u>	T	1687.76	<u>844.38</u>	563.26	<u>422.69</u>	14
15	1741.85	871.43	581.29	436.22	1769.85	<u>885.43</u>	<u>590.62</u>	443.22	M	1586.71	<u>793.86</u>	<u>529.57</u>	<u>397.43</u>	13
16	1842.90	<u>921.95</u>	<u>614.97</u>	<u>461.48</u>	1870.90	<u>935.95</u>	<u>624.30</u>	468.48	T	1455.67	<u>728.34</u>	485.89	<u>364.67</u>	12
17	1943.95	972.48	648.65	486.74	1971.94	986.48	<u>657.99</u>	493.74	T	1354.62	<u>677.81</u>	452.21	339.41	11
18	2057.03	<u>1029.02</u>	<u>686.35</u>	<u>515.01</u>	2085.03	1043.02	<u>695.68</u>	<u>522.01</u>	L	1253.57	<u>627.29</u>	418.53	314.15	10
19	2144.07	1072.54	715.36	<u>536.77</u>	2172.06	<u>1086.53</u>	724.69	543.77	S	1140.49	<u>570.75</u>	380.83	285.88	9
20	2257.15	1129.08	753.05	565.04	2285.14	<u>1143.08</u>	<u>762.39</u>	572.04	I	1053.46	<u>527.23</u>	351.82	264.12	8
21	2540.15	1270.58	847.39	<u>635.79</u>	2568.15	1284.58	<u>856.72</u>	<u>642.79</u>	S-Azilso	940.37	<u>470.69</u>	314.13	235.85	7
22	2611.19	1306.10	871.07	653.55	2639.18	1320.10	880.40	<u>660.55</u>	A	657.37	329.19	219.79	165.10	6
23	2767.29	1384.15	<u>923.10</u>	<u>692.58</u>	2795.29	1398.15	<u>932.43</u>	699.58	R	586.33	293.67	196.12	147.34	5
24	2881.33	1441.17	961.12	<u>721.09</u>	2909.33	1455.17	<u>970.45</u>	<u>728.09</u>	N	430.23	215.62	144.08	108.31	4
25	2968.37	1484.69	990.13	<u>742.85</u>	2996.36	1498.68	999.46	<u>749.85</u>	S	316.19	158.60	106.07	79.80	3
26	3081.45	1541.23	1027.82	<u>771.12</u>	3109.44	1555.23	1037.15	<u>778.12</u>	L	229.15	115.08	77.06	58.04	2
27									P	116.07	58.54	39.36	29.77	1

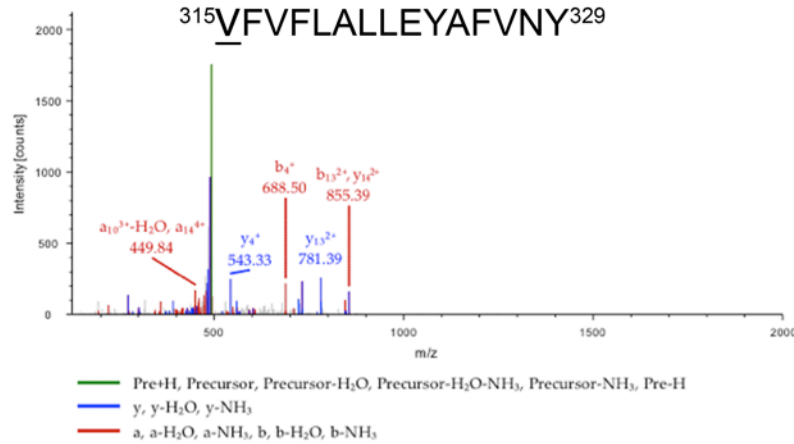
Fig S5. Identification of aziisoflurane adduct within the FLAG- $\alpha_1$  subunit of FLAG- $\alpha_1\beta_3$  GABA<sub>A</sub> receptor photolabeled in the presence of 30  $\mu$ M aziisoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing aziisoflurane  $\alpha_1$ -V286/ $\alpha_1$ -S307 adduct. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.





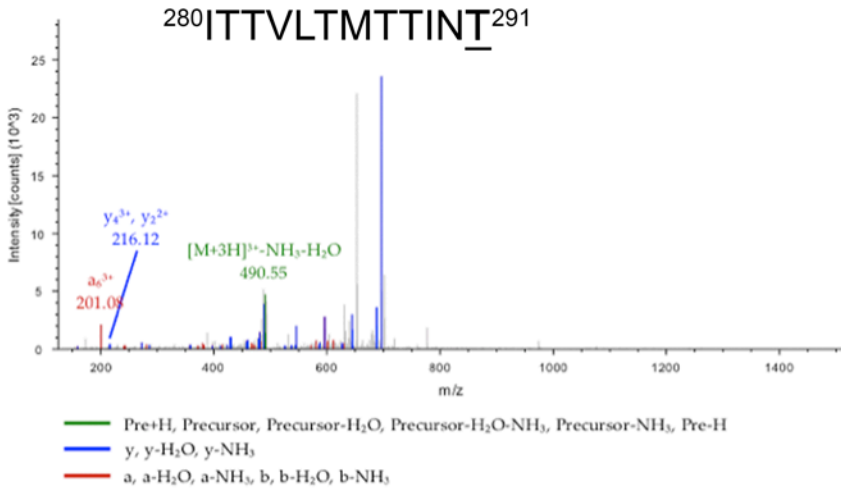
#1	a <sup>+</sup>	a <sup>2+</sup>	a <sup>3+</sup>	b <sup>+</sup>	b <sup>2+</sup>	b <sup>3+</sup>	Seq.	y <sup>+</sup>	y <sup>2+</sup>	y <sup>3+</sup>	#2
1	120.05	60.53	40.69	148.04	74.52	50.02	M-Oxidation				16
2	234.09	117.55	78.70	<b><u>262.09</u></b>	131.55	88.03	N	1862.74	<b><u>931.87</u></b>	<b><u>621.58</u></b>	15
3	<b><u>347.17</u></b>	174.09	116.40	375.17	188.09	125.73	I	1748.69	<b><u>874.85</u></b>	583.57	14
4	462.20	231.60	154.74	490.20	<b><u>245.60</u></b>	164.07	D	1635.61	<b><u>818.31</u></b>	545.88	13
5	575.29	288.15	192.43	<b><u>603.28</u></b>	302.14	201.77	I	1520.58	<b><u>760.80</u></b>	<b><u>507.53</u></b>	12
6	842.29	421.65	281.44	870.29	435.65	290.77	A-Azilso	1407.50	704.25	469.84	11
7	929.33	465.17	310.45	957.32	479.16	319.78	S	1140.49	<b><u>570.75</u></b>	380.84	10
8	1042.41	521.71	348.14	1070.41	535.71	357.47	I	1053.46	527.23	351.82	9
9	1157.44	579.22	386.48	1185.43	593.22	<b><u>395.82</u></b>	D	940.38	470.69	314.13	8
10	1288.48	644.74	430.16	1316.47	<b><u>658.74</u></b>	439.50	M	825.35	413.18	275.79	7
11	1387.55	<b><u>694.28</u></b>	463.19	1415.54	708.27	472.52	V	<b><u>694.31</u></b>	<b><u>347.66</u></b>	232.11	6
12	1474.58	<b><u>737.79</u></b>	<b><u>492.20</u></b>	1502.57	<b><u>751.79</u></b>	501.53	S	595.24	298.12	199.08	5
13	1603.62	<b><u>802.31</u></b>	535.21	1631.62	816.31	544.54	E	<b><u>508.21</u></b>	254.61	170.07	4
14	1702.69	<b><u>851.85</u></b>	568.23	1730.68	<b><u>865.85</u></b>	<b><u>577.57</u></b>	V	379.16	190.09	127.06	3
15	1816.73	908.87	606.25	1844.73	<b><u>922.87</u></b>	<b><u>615.58</u></b>	N	280.10	140.55	94.04	2
16							M-Oxidation	166.05	83.53	56.02	1

Fig S6. Identification of aziisoflurane adduct within the  $\beta_3$  subunit of FLAG- $\alpha_1\beta_3$  GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu\text{M}$  aziisoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing aziisoflurane  $\beta_3$ -A70 adduct. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.



#1	a <sup>+</sup>	a <sup>2+</sup>	a <sup>3+</sup>	a <sup>4+</sup>	b <sup>+</sup>	b <sup>2+</sup>	b <sup>3+</sup>	b <sup>4+</sup>	Seq.	y <sup>+</sup>	y <sup>2+</sup>	y <sup>3+</sup>	y <sup>4+</sup>	#2
1	268.05	134.53	90.02	67.77	296.05	148.53	99.35	74.77	V-Azilso					15
2	<b>415.12</b>	208.06	139.05	104.54	<b>443.12</b>	222.06	148.38	111.53	F	1709.88	<b>855.44</b>	570.63	<b>428.23</b>	14
3	514.19	257.60	172.07	129.30	542.18	<b>271.60</b>	181.40	136.30	V	1562.81	<b>781.91</b>	<b>521.61</b>	<b>391.46</b>	13
4	661.26	331.13	<b>221.09</b>	166.07	<b>689.25</b>	345.13	230.42	173.07	F	1463.75	<b>732.38</b>	<b>488.59</b>	366.69	12
5	774.34	387.67	258.79	<b>194.34</b>	802.34	<b>401.67</b>	268.12	201.34	L	1316.68	658.84	<b>439.56</b>	329.92	11
6	<b>845.38</b>	423.19	282.46	212.10	873.37	437.19	291.80	219.10	A	1203.59	<b>602.30</b>	401.87	<b>301.65</b>	10
7	958.46	<b>479.74</b>	320.16	240.37	986.46	<b>493.73</b>	329.49	247.37	L	1132.56	<b>566.78</b>	378.19	<b>283.89</b>	9
8	1071.55	<b>536.28</b>	357.85	268.64	1099.54	<b>550.27</b>	367.19	<b>275.64</b>	L	1019.47	510.24	340.50	255.62	8
9	1200.59	<b>600.80</b>	<b>400.87</b>	<b>300.90</b>	1228.58	614.80	<b>410.20</b>	307.90	E	906.39	<b>453.70</b>	<b>302.80</b>	227.35	7
10	1363.65	682.33	<b>455.22</b>	<b>341.67</b>	1391.65	696.33	<b>464.55</b>	348.67	Y	777.35	389.18	259.79	195.09	6
11	1434.69	717.85	<b>478.90</b>	<b>359.43</b>	1462.68	<b>731.85</b>	<b>488.23</b>	366.43	A	614.28	307.64	205.43	154.33	5
12	1581.76	791.38	527.92	396.20	1609.75	805.38	<b>537.26</b>	403.19	F	<b>543.24</b>	<b>272.13</b>	181.75	136.57	4
13	1680.83	840.92	<b>560.95</b>	420.96	1708.82	<b>854.91</b>	570.28	<b>427.96</b>	V	396.18	198.59	132.73	99.80	3
14	1795.85	898.43	599.29	<b>449.72</b>	1823.85	912.43	<b>608.62</b>	<b>456.72</b>	N-Deamidated	297.11	149.06	99.71	75.03	2
15									Y	182.08	91.54	61.37	46.28	1

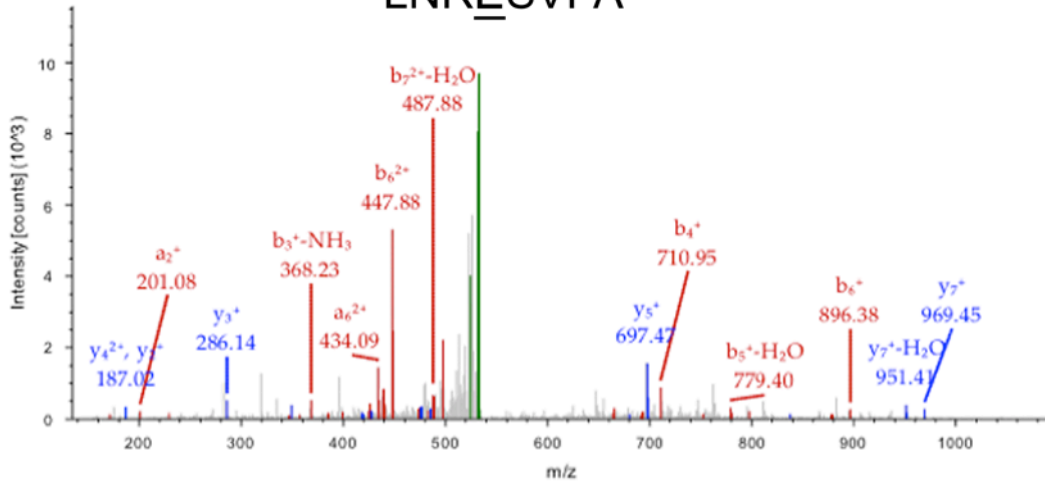
Fig S8. Identification of aziisoflurane adduct within the  $\beta_3$  subunit of FLAG- $\alpha_1\beta_3$  GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu$ M aziisoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing aziisoflurane  $\beta_3$ -V315 adduct. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.



#1	a <sup>+</sup>	a <sup>2+</sup>	a <sup>3+</sup>	b <sup>+</sup>	b <sup>2+</sup>	b <sup>3+</sup>	Seq.	y <sup>+</sup>	y <sup>2+</sup>	y <sup>3+</sup>	#2
1	86.10	43.55	29.37	114.09	57.55	38.70	I				12
2	187.14	94.08	63.05	215.14	108.07	72.38	T	1391.60	<b>696.30</b>	464.54	11
3	288.19	144.60	96.74	316.19	<b>158.60</b>	106.07	T	1290.55	<b>645.78</b>	<b>430.85</b>	10
4	387.26	194.13	129.76	<b>415.26</b>	208.13	139.09	V	1189.50	<b>595.25</b>	<b>397.17</b>	9
5	500.34	250.68	167.45	528.34	264.67	176.78	L	1090.43	<b>545.72</b>	364.15	8
6	<b>601.39</b>	301.20	<b>201.14</b>	<b>629.39</b>	315.20	210.47	T	977.35	<b>489.18</b>	326.45	7
7	732.43	366.72	<b>244.82</b>	760.43	<b>380.72</b>	254.15	M	876.30	438.65	292.77	6
8	833.48	417.24	278.50	861.48	<b>431.24</b>	287.83	T	745.26	373.13	249.09	5
9	934.53	<b>467.77</b>	312.18	962.52	<b>481.77</b>	321.51	T	<b>644.21</b>	322.61	<b>215.41</b>	4
10	1047.61	524.31	349.88	1075.61	538.31	359.21	I	<b>543.16</b>	<b>272.09</b>	181.73	3
11	1161.65	<b>581.33</b>	387.89	1189.65	<b>595.33</b>	<b>397.22</b>	N	<b>430.08</b>	<b>215.54</b>	144.03	2
12							T-AziIso	316.04	<b>158.52</b>	106.02	1

Fig S8. Identification of aziisoflurane adduct within the  $\beta_3$  subunit of FLAG- $\alpha_1\beta_3$  GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu$ M aziisoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing aziisoflurane  $\beta_3$ -291 adduct. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.

282LNRESVPA<sup>289</sup>

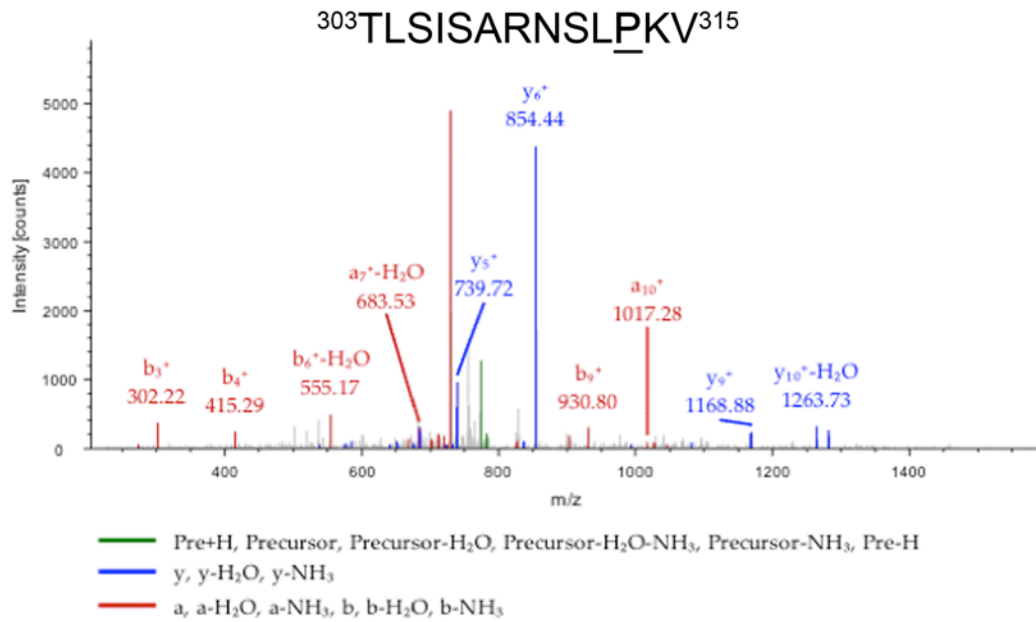


— Pre+H, Precursor, Precursor-H<sub>2</sub>O, Precursor-H<sub>2</sub>O-NH<sub>3</sub>, Precursor-NH<sub>3</sub>, Pre-H  
— y, y-H<sub>2</sub>O, y-NH<sub>3</sub>  
— a, a-H<sub>2</sub>O, a-NH<sub>3</sub>, b, b-H<sub>2</sub>O, b-NH<sub>3</sub>

#1	a <sup>+</sup>	a <sup>2+</sup>	b <sup>+</sup>	b <sup>2+</sup>	Seq.	y <sup>+</sup>	y <sup>2+</sup>	#2
1	86.10	43.55	114.09	57.55	L			8
2	<b><u>201.12</u></b>	101.07	<b><u>229.12</u></b>	115.06	N-Deamidated	<b><u>969.35</u></b>	<b><u>485.18</u></b>	7
3	<b><u>357.22</u></b>	179.12	<b><u>385.22</u></b>	193.11	R	854.32	<b><u>427.67</u></b>	6
4	682.24	341.62	<b><u>710.23</u></b>	355.62	E-Azilso	<b><u>698.22</u></b>	<b><u>349.61</u></b>	5
5	769.27	<b><u>385.14</u></b>	<b><u>797.27</u></b>	<b><u>399.14</u></b>	S	373.21	<b><u>187.11</u></b>	4
6	868.34	<b><u>434.67</u></b>	<b><u>896.33</u></b>	<b><u>448.67</u></b>	V	<b><u>286.18</u></b>	143.59	3
7	965.39	<b><u>483.20</u></b>	993.39	<b><u>497.20</u></b>	P	<b><u>187.11</u></b>	94.06	2
8					A	90.05	45.53	1

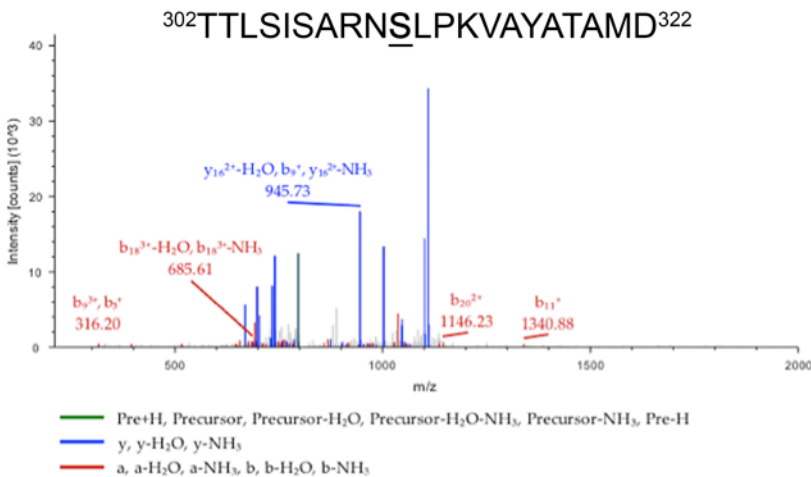
Fig S9. Identification of aziisoflurane adduct within the FLAG- $\alpha_1$  subunit of FLAG- $\alpha_1\beta_3\gamma_{2L}$ -L3-1D4 GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu$ M aziisoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing aziisoflurane  $\alpha_1$ -E285 adduct. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.





#1	a*	a <sup>2</sup> *	b*	b <sup>2</sup> *	Seq.	y*	y <sup>2</sup> *	#2
1	74.06	37.53	102.05	51.53	T			13
2	187.14	94.08	215.14	108.07	L	1481.72	741.36	12
3	274.18	137.59	<b>302.17</b>	151.59	S	1368.63	<b>684.82</b>	11
4	387.26	194.13	<b>415.26</b>	208.13	I	<b>1281.60</b>	<b>641.31</b>	10
5	474.29	237.65	502.29	251.65	S	<b>1168.52</b>	<b>584.76</b>	9
6	545.33	<b>273.17</b>	573.32	287.17	A	<b>1081.49</b>	541.25	8
7	<b>701.43</b>	351.22	<b>729.43</b>	365.22	R	1010.45	505.73	7
8	816.46	408.73	844.45	422.73	N-Deamidated	<b>854.35</b>	427.68	6
9	<b>903.49</b>	452.25	<b>931.48</b>	466.25	S	<b>739.32</b>	370.16	5
10	<b>1016.57</b>	508.79	<b>1044.57</b>	522.79	L	<b>652.29</b>	326.65	4
11	1309.60	655.30	1337.59	<b>669.30</b>	P-Azilso	<b>539.21</b>	270.11	3
12	1437.69	<b>719.35</b>	1465.69	733.35	K	246.18	123.59	2
13					V	118.09	59.55	1

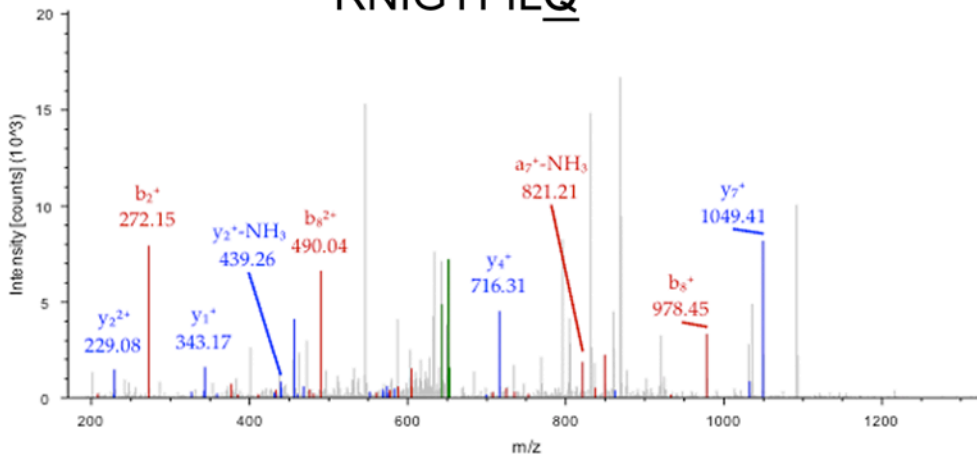
Fig S10. Identification of aziisoflurane adduct within the FLAG- $\alpha_1$  subunit of FLAG- $\alpha_1\beta_3\gamma_{2L}$ -L3-1D4 GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu\text{M}$  aziisoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing aziisoflurane  $\alpha_1$ -P313 adduct. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.



#1	a*	a <sup>2+</sup>	a <sup>3+</sup>	b*	b <sup>2+</sup>	b <sup>3+</sup>	Seq.	y*	y <sup>2+</sup>	y <sup>3+</sup>	#2
1	74.06	37.53	25.36	102.05	51.53	34.69	T				21
2	175.11	88.06	59.04	203.10	102.05	68.37	T	2322.05	1161.53	<b>774.69</b>	20
3	288.19	144.60	96.74	<b>316.19</b>	158.60	106.07	L	2221.00	<b>1111.01</b>	<b>741.01</b>	19
4	375.22	188.12	125.75	403.22	202.11	135.08	S	2107.92	<b>1054.46</b>	<b>703.31</b>	18
5	488.31	244.66	163.44	<b>516.30</b>	258.66	172.77	I	2020.89	1010.95	674.30	17
6	575.34	288.17	192.45	603.33	302.17	201.78	S	1907.80	<b>954.41</b>	636.61	16
7	<b>646.38</b>	323.69	216.13	674.37	337.69	225.46	A	1820.77	<b>910.89</b>	607.60	15
8	802.48	401.74	268.16	830.47	415.74	277.50	R	1749.73	<b>875.37</b>	583.92	14
9	<b>917.51</b>	459.26	306.51	<b>945.50</b>	473.25	<b>315.84</b>	N-Deamidated	1593.63	<b>797.32</b>	531.88	13
10	1200.51	600.76	400.84	1228.50	614.76	410.17	S-Azilso	1478.61	<b>739.81</b>	493.54	12
11	1313.59	657.30	438.54	<b>1341.59</b>	671.30	447.87	L	1195.60	598.31	399.21	11
12	1410.65	705.83	470.89	1438.64	<b>719.82</b>	480.22	P	1082.52	541.76	361.51	10
13	1538.74	769.87	513.58	1566.74	<b>783.87</b>	522.92	K	<b>985.47</b>	493.24	329.16	9
14	1637.81	819.41	546.61	1665.80	833.41	555.94	V	857.37	429.19	286.46	8
15	1708.85	854.93	570.29	1736.84	<b>868.92</b>	579.62	A	<b>758.30</b>	379.65	253.44	7
16	1871.91	936.46	624.64	1899.90	950.46	633.97	Y	<b>687.27</b>	344.14	229.76	6
17	1942.95	<b>971.98</b>	648.32	1970.94	985.97	657.65	A	524.20	262.60	175.41	5
18	2043.99	1022.50	682.00	2071.99	<b>1036.50</b>	<b>691.33</b>	T	453.17	227.09	151.73	4
19	2115.03	<b>1058.02</b>	705.68	2143.03	1072.02	715.01	A	352.12	176.56	118.04	3
20	2262.07	1131.54	<b>754.69</b>	2290.06	<b>1145.53</b>	<b>764.03</b>	M-Oxidation	281.08	141.04	94.36	2
21							D	134.04	67.53	45.35	1

Fig S11. Identification of aziisoflurane adduct within the FLAG- $\alpha_1$  subunit of FLAG- $\alpha_1\beta_3\gamma_{2L}$ -L3-1D4 GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu\text{M}$  aziisoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing aziisoflurane  $\alpha_1$ -S311 adduct. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.

**241RNIGYFILQ<sup>249</sup>**



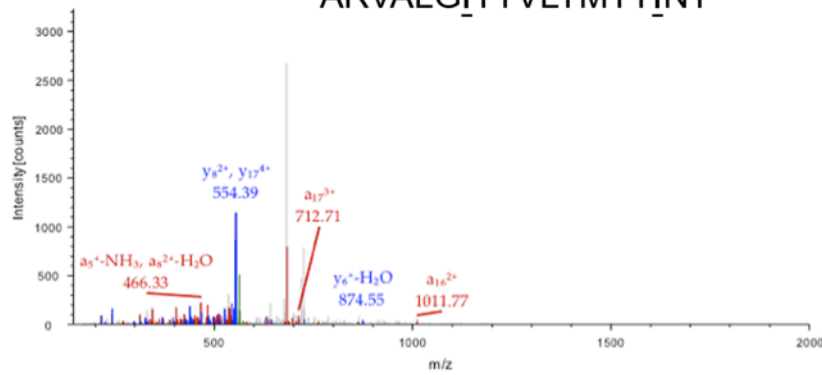
— Pre+H, Precursor, Precursor-H<sub>2</sub>O, Precursor-H<sub>2</sub>O-NH<sub>3</sub>, Precursor-NH<sub>3</sub>, Pre-H  
— y, y-NH<sub>3</sub>  
— a, a-NH<sub>3</sub>, b, b-NH<sub>3</sub>

#1	a*	a <sup>2+</sup>	b*	b <sup>2+</sup>	Seq.	y*	y <sup>2+</sup>	#2
1	129.11	65.06	157.11	79.06	R			9
2	244.14	122.57	<b>272.14</b>	136.57	N-Deamidated	1164.48	<b>582.74</b>	8
3	357.22	179.12	<b>385.22</b>	193.11	I	1049.45	525.23	7
4	414.25	<b>207.63</b>	442.24	221.62	G	936.37	<b>468.69</b>	6
5	<b>577.31</b>	289.16	<b>605.30</b>	303.16	Y	879.35	<b>440.18</b>	5
6	<b>724.38</b>	362.69	<b>752.37</b>	<b>376.69</b>	F	716.28	<b>358.65</b>	4
7	<b>837.46</b>	419.23	865.46	<b>433.23</b>	I	<b>569.22</b>	285.11	3
8	950.55	<b>475.78</b>	<b>978.54</b>	<b>489.77</b>	L	456.13	<b>228.57</b>	2
9					Q-Azilso	<b>343.05</b>	172.03	1

Fig S12. Identification of aziisoflurane adduct within the  $\beta_3$  subunits of FLAG- $\alpha_1\beta_3\gamma_{2L}$ -L3-1D4 GABA<sub>A</sub> receptors photolabeled in the presence of 30 $\mu$ M aziisoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing aziisoflurane  $\beta_3$ -Q249 modification within the  $\beta_3$  subunit. Residue modified by photolabel derivative is in bold and underlined.

Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.

274ARVALGITTTLTMTTINT<sup>291</sup>



— Pre+H, Precursor, Precursor-H<sub>2</sub>O, Precursor-H<sub>2</sub>O-NH<sub>3</sub>, Precursor-NH<sub>3</sub>, Pre-H  
— y, y-H<sub>2</sub>O, y-NH<sub>3</sub>  
— a, a-H<sub>2</sub>O, a-NH<sub>3</sub>, b, b-H<sub>2</sub>O, b-NH<sub>3</sub>

#1	a <sup>+</sup>	a <sup>2+</sup>	a <sup>3+</sup>	a <sup>4+</sup>	b <sup>+</sup>	b <sup>2+</sup>	b <sup>3+</sup>	b <sup>4+</sup>	Seq.	y <sup>-</sup>	y <sup>2+</sup>	y <sup>3+</sup>	y <sup>4+</sup>	#2
1	44.05	22.53	15.35	11.77	72.04	36.53	24.69	18.77	A					18
2	200.15	100.58	67.39	50.79	228.15	114.58	76.72	57.79	R	2213.94	1107.47	738.65	<b>554.24</b>	17
3	299.22	150.11	100.41	75.56	327.21	164.11	109.74	82.56	V	2057.84	1029.42	686.62	<b>515.22</b>	16
4	<b>370.26</b>	185.63	124.09	93.32	398.25	199.63	133.42	100.32	A	1958.77	979.89	653.60	<b>490.45</b>	15
5	<b>483.34</b>	<b>242.17</b>	161.78	121.59	<b>511.34</b>	256.17	171.12	128.59	L	1887.74	944.37	<b>629.92</b>	<b>472.69</b>	14
6	<b>540.36</b>	<b>270.68</b>	180.79	135.85	568.36	284.68	190.12	142.84	G	1774.65	887.83	592.22	<b>444.42</b>	13
7	849.42	<b>425.21</b>	283.81	213.11	877.41	<b>439.21</b>	293.14	220.11	I-Azilso	1717.63	859.32	<b>573.21</b>	430.16	12
8	950.46	475.74	317.49	238.37	978.46	<b>489.73</b>	<b>326.82</b>	245.37	T	1408.57	704.79	470.20	352.90	11
9	1051.51	<b>526.26</b>	351.18	263.63	1079.51	<b>540.26</b>	<b>360.51</b>	<b>270.63</b>	T	1307.53	654.27	436.51	<b>327.64</b>	10
10	1150.58	575.79	384.20	288.40	1178.58	589.79	393.53	295.40	V	1206.48	603.74	402.83	302.38	9
11	1263.67	<b>632.34</b>	<b>421.89</b>	316.67	1291.66	646.33	<b>431.22</b>	323.67	L	1107.41	<b>554.21</b>	<b>369.81</b>	277.61	8
12	1364.71	<b>682.86</b>	<b>455.58</b>	<b>341.93</b>	1392.71	<b>696.86</b>	<b>464.91</b>	348.93	T	994.33	<b>497.67</b>	<b>332.11</b>	249.34	7
13	1511.75	756.38	504.59	378.69	1539.74	770.38	<b>513.92</b>	385.69	M-Oxidation	893.28	<b>447.14</b>	<b>298.43</b>	<b>224.08</b>	6
14	1612.80	806.90	<b>538.27</b>	<b>403.95</b>	1640.79	820.90	<b>547.60</b>	410.95	T	746.24	373.63	249.42	187.32	5
15	1713.84	857.43	<b>571.95</b>	<b>429.22</b>	1741.84	871.42	<b>581.28</b>	436.22	T	<b>645.20</b>	323.10	<b>215.74</b>	162.05	4
16	2022.90	<b>1011.95</b>	674.97	<b>506.48</b>	2050.89	1025.95	684.30	<b>513.48</b>	I-Azilso	<b>544.15</b>	272.58	182.05	136.79	3
17	2137.93	1069.47	<b>713.31</b>	<b>535.24</b>	2165.92	1083.46	722.65	<b>542.24</b>	N-Deamidated	235.09	118.05	79.04	59.53	2
18									T	120.07	60.54	40.69	30.77	1

Fig S13. Identification of aziisoflurane adducts within the  $\beta_3$  subunits of FLAG- $\alpha_1\beta_3\gamma_{2L}$ -L3-1D4 GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu$ M aziisoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing aziisoflurane  $\beta_3$ -I280/ $\beta_3$ -I289(B), modification within the  $\beta_3$  subunit. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.

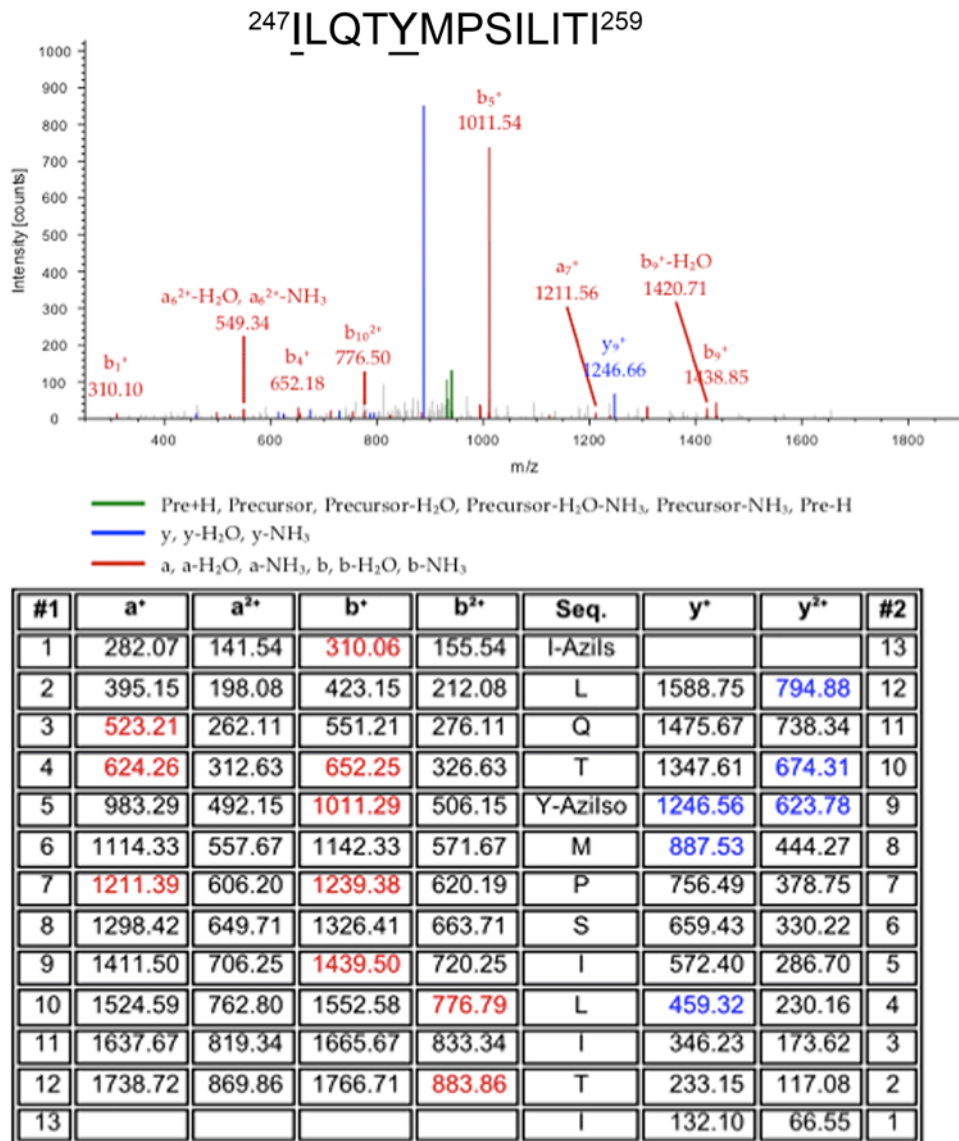
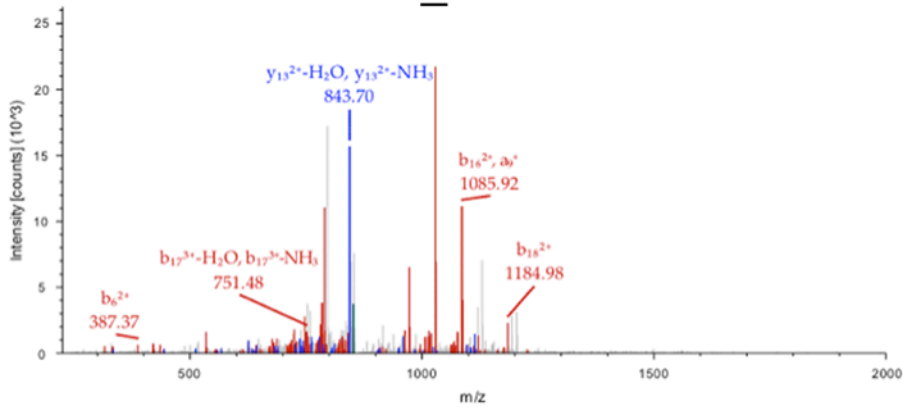


Fig S14. Identification of aziisoflurane adducts within the  $\beta_3$  subunits of FLAG- $\alpha_1\beta_3\gamma_{2L}$ -L3-1D4 GABA<sub>A</sub> receptors photolabeled in the presence of 30 $\mu$ M aziisoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing aziisoflurane  $\beta_3$ -I247/  $\beta_3$ -Y251 modification within the  $\beta_3$  subunit. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.



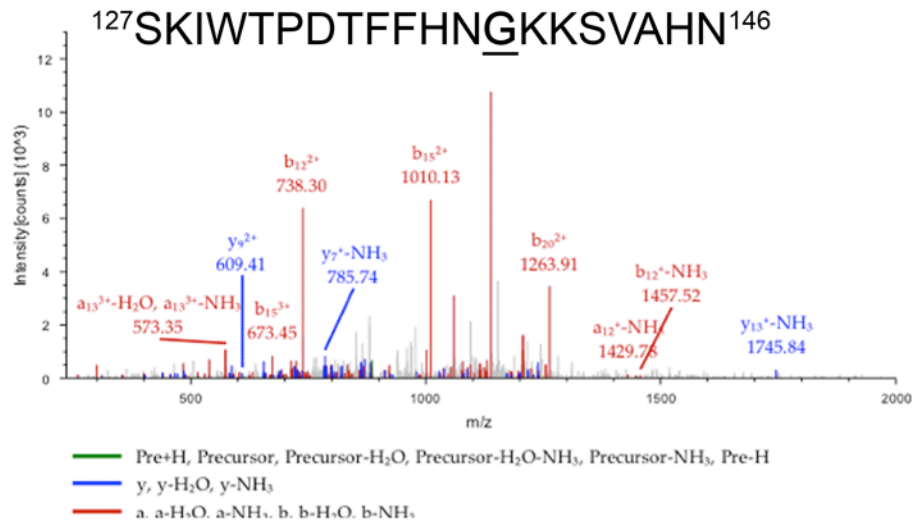
<sup>271</sup>RMGYFTIQTYIPCTLIVVLS<sup>290</sup>



— Pre+H, Precursor, Precursor-H<sub>2</sub>O, Precursor-H<sub>2</sub>O-NH<sub>3</sub>, Precursor-NH<sub>3</sub>, Pre-H  
 — y, y-H<sub>2</sub>O, y-NH<sub>3</sub>  
 — a, a-H<sub>2</sub>O, a-NH<sub>3</sub>, b, b-H<sub>2</sub>O, b-NH<sub>3</sub>

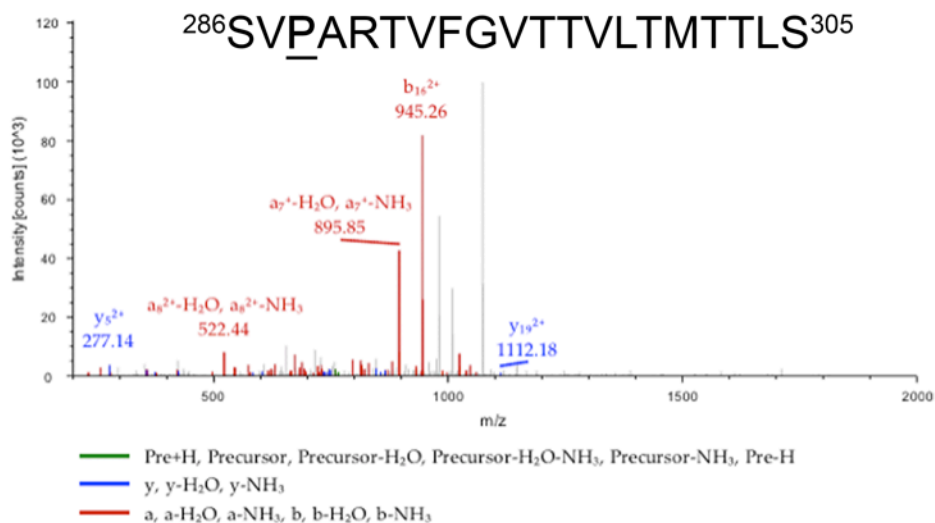
#1	a*	a <sup>2+</sup>	a <sup>3+</sup>	b*	b <sup>2+</sup>	b <sup>3+</sup>	Seq.	y*	y <sup>2+</sup>	y <sup>3+</sup>	#2
1	129.11	65.06	43.71	157.11	79.06	53.04	R				20
2	276.15	138.58	92.72	304.14	152.58	102.05	M-Oxidation	2431.12	1216.06	<b>811.04</b>	19
3	<b>333.17</b>	167.09	111.73	361.17	181.09	121.06	G	2284.08	1142.54	<b>762.03</b>	18
4	496.23	248.62	166.08	524.23	262.62	175.41	Y	2227.06	<b>1114.03</b>	<b>743.02</b>	17
5	<b>643.30</b>	322.15	215.11	<b>671.30</b>	336.15	224.44	F	2064.00	<b>1032.50</b>	<b>688.67</b>	16
6	<b>744.35</b>	372.68	248.79	<b>772.34</b>	<b>386.68</b>	258.12	T	1916.93	<b>958.97</b>	<b>639.65</b>	15
7	857.43	429.22	286.48	885.43	<b>443.22</b>	295.81	I	1815.88	<b>908.44</b>	605.96	14
8	<b>985.49</b>	493.25	329.17	<b>1013.49</b>	507.25	338.50	Q	1702.80	<b>851.90</b>	<b>568.27</b>	13
9	<b>1086.54</b>	543.77	362.85	<b>1114.54</b>	<b>557.77</b>	372.18	T	1574.74	<b>787.87</b>	525.58	12
10	1445.57	<b>723.29</b>	482.53	1473.57	<b>737.29</b>	491.86	Y-Azilso	1473.69	<b>737.35</b>	491.90	11
11	1558.66	<b>779.83</b>	520.22	1586.65	<b>793.83</b>	529.56	I	<b>1114.65</b>	<b>557.83</b>	372.22	10
12	1655.71	<b>828.36</b>	<b>552.58</b>	1683.71	<b>842.36</b>	561.91	P	<b>1001.57</b>	501.29	<b>334.53</b>	9
13	1815.74	<b>908.37</b>	605.92	1843.74	<b>922.37</b>	<b>615.25</b>	C-Carbamidomethyl	<b>904.52</b>	452.76	302.18	8
14	1916.79	<b>958.90</b>	<b>639.60</b>	1944.78	<b>972.90</b>	<b>648.93</b>	T	<b>744.49</b>	372.75	248.83	7
15	2029.87	<b>1015.44</b>	<b>677.30</b>	2057.87	<b>1029.44</b>	<b>686.63</b>	L	<b>643.44</b>	322.22	215.15	6
16	2142.96	<b>1071.98</b>	<b>714.99</b>	2170.95	<b>1085.98</b>	<b>724.32</b>	I	530.35	265.68	177.46	5
17	2242.03	<b>1121.52</b>	<b>748.01</b>	2270.02	<b>1135.51</b>	<b>757.35</b>	V	417.27	209.14	139.76	4
18	2341.10	1171.05	<b>781.04</b>	2369.09	<b>1185.05</b>	<b>790.37</b>	V	318.20	159.60	106.74	3
19	2454.18	<b>1227.59</b>	<b>818.73</b>	2482.17	1241.59	<b>828.06</b>	L	219.13	110.07	73.72	2
20							S	106.05	53.53	36.02	1

Fig S15. Identification of aziisoflurane adducts within the  $\gamma_{2L}$ -L3-1D4 subunit of FLAG- $\alpha_1\beta_3\gamma_{2L}$ -L3-1D4 GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu$ M aziisoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing aziisoflurane  $\gamma_{2L}$ -Y280 modification within the  $\gamma_{2L}$ -L3-1D4 subunit. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.



#1	a*	a <sup>+</sup>	a <sup>+</sup>	b*	b <sup>+</sup>	b <sup>+</sup>	Seq.	y*	y <sup>+</sup>	y <sup>+</sup>	#2
1	60.04	30.53	20.69	88.04	44.52	30.02	S				21
2	188.14	94.57	63.38	216.13	108.57	72.72	K	2604.17	1302.59	<b>868.73</b>	20
3	301.22	151.12	101.08	329.22	165.11	110.41	I	2476.08	<b>1238.54</b>	826.03	19
4	<b>487.30</b>	244.16	163.11	<b>515.30</b>	<b>258.15</b>	172.44	W	2362.99	<b>1182.00</b>	<b>788.34</b>	18
5	<b>588.35</b>	294.68	196.79	616.35	308.68	206.12	T	2176.92	<b>1088.96</b>	<b>726.31</b>	17
6	<b>685.40</b>	343.21	229.14	<b>713.40</b>	357.20	238.47	P	2075.87	<b>1038.44</b>	<b>692.63</b>	16
7	<b>800.43</b>	<b>400.72</b>	267.48	828.43	414.72	276.81	D	1978.82	989.91	660.28	15
8	901.48	451.24	301.16	929.47	465.24	<b>310.50</b>	T	1863.79	932.40	621.93	14
9	<b>1048.55</b>	524.78	350.19	<b>1076.54</b>	<b>538.77</b>	359.52	F	1762.74	<b>881.87</b>	<b>588.25</b>	13
10	<b>1195.61</b>	598.31	<b>399.21</b>	<b>1223.61</b>	612.31	408.54	F	1615.67	<b>808.34</b>	539.23	12
11	1332.67	666.84	444.90	1360.67	680.84	454.23	H	1468.60	<b>734.81</b>	490.21	11
12	<b>1446.72</b>	<b>723.86</b>	<b>482.91</b>	1474.71	<b>737.86</b>	<b>492.24</b>	N	1331.54	666.28	444.52	10
13	1733.74	<b>867.37</b>	578.58	1761.73	<b>881.37</b>	<b>587.92</b>	G-AziSev	<b>1217.50</b>	<b>609.25</b>	406.51	9
14	1861.83	931.42	621.28	1889.83	945.42	<b>630.61</b>	K	<b>930.48</b>	<b>465.74</b>	<b>310.83</b>	8
15	1989.93	995.47	663.98	2017.92	<b>1009.46</b>	<b>673.31</b>	K	<b>802.39</b>	<b>401.70</b>	268.13	7
16	2076.96	<b>1038.98</b>	<b>692.99</b>	2104.95	<b>1052.98</b>	<b>702.32</b>	S	<b>674.29</b>	337.65	225.44	6
17	2176.03	<b>1088.52</b>	<b>726.01</b>	2204.02	<b>1102.51</b>	<b>735.35</b>	V	<b>587.26</b>	294.13	196.43	5
18	2247.06	<b>1124.04</b>	<b>749.69</b>	2275.06	<b>1138.03</b>	759.02	A	<b>488.19</b>	244.60	163.40	4
19	2384.12	1192.56	<b>795.38</b>	2412.12	<b>1206.56</b>	<b>804.71</b>	H	417.16	209.08	139.72	3
20	2498.17	1249.59	<b>833.39</b>	2526.16	<b>1263.58</b>	<b>842.72</b>	N	280.10	140.55	94.04	2
21							M-Oxidation	166.05	83.53	56.02	1

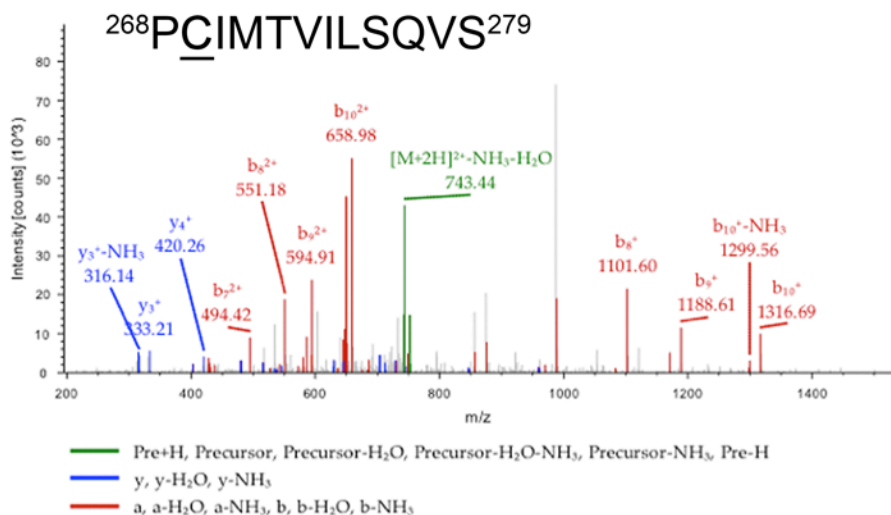
Fig S16. Identification of azisevoflurane adduct within the FLAG- $\alpha_1$  subunit of FLAG- $\alpha_1\beta_3$  GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu$ M azisevoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing aziisoflurane  $\alpha$ 1-G139. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.



#1	a <sup>+</sup>	a <sup>2+</sup>	a <sup>3+</sup>	b <sup>+</sup>	b <sup>2+</sup>	b <sup>3+</sup>	Seq.	y <sup>+</sup>	y <sup>2+</sup>	y <sup>3+</sup>	#2
1	60.04	30.53	20.69	88.04	44.52	30.02	S				20
2	159.11	80.06	53.71	187.11	94.06	63.04	V	2224.10	1112.55	742.04	19
3	486.16	243.59	162.73	514.16	257.58	172.06	P-AziSev	2125.03	1063.02	709.01	18
4	557.20	279.10	186.41	585.20	293.10	195.74	A	1797.98	899.49	600.00	17
5	713.30	357.15	238.44	741.30	371.15	247.77	R	1726.94	863.97	576.32	16
6	814.35	407.68	272.12	842.34	421.68	281.45	T	1570.84	785.92	524.28	15
7	913.42	457.21	305.14	941.41	471.21	314.48	V	1469.79	735.40	490.60	14
8	1060.49	530.75	354.17	1088.48	544.74	363.50	F	1370.72	685.87	457.58	13
9	1117.51	559.26	373.17	1145.50	573.25	382.51	G	1223.66	612.33	408.56	12
10	1216.58	608.79	406.20	1244.57	622.79	415.53	V	1166.63	583.82	389.55	11
11	1317.62	659.32	439.88	1345.62	673.31	449.21	T	1067.57	534.29	356.53	10
12	1418.67	709.84	473.56	1446.67	723.84	482.89	T	966.52	483.76	322.84	9
13	1517.74	759.37	506.58	1545.73	773.37	515.92	V	865.47	433.24	289.16	8
14	1630.82	815.92	544.28	1658.82	829.91	553.61	L	766.40	383.70	256.14	7
15	1731.87	866.44	577.96	1759.87	880.44	587.29	T	653.32	327.16	218.44	6
16	1862.91	931.96	621.64	1890.91	945.96	630.97	M	552.27	276.64	184.76	5
17	1963.96	982.48	655.32	1991.95	996.48	664.66	T	421.23	211.12	141.08	4
18	2065.01	1033.01	689.01	2093.00	1047.00	698.34	T	320.18	160.59	107.40	3
19	2178.09	1089.55	726.70	2206.09	1103.55	736.03	L	219.13	110.07	73.72	2
20							S	106.05	53.53	36.02	1

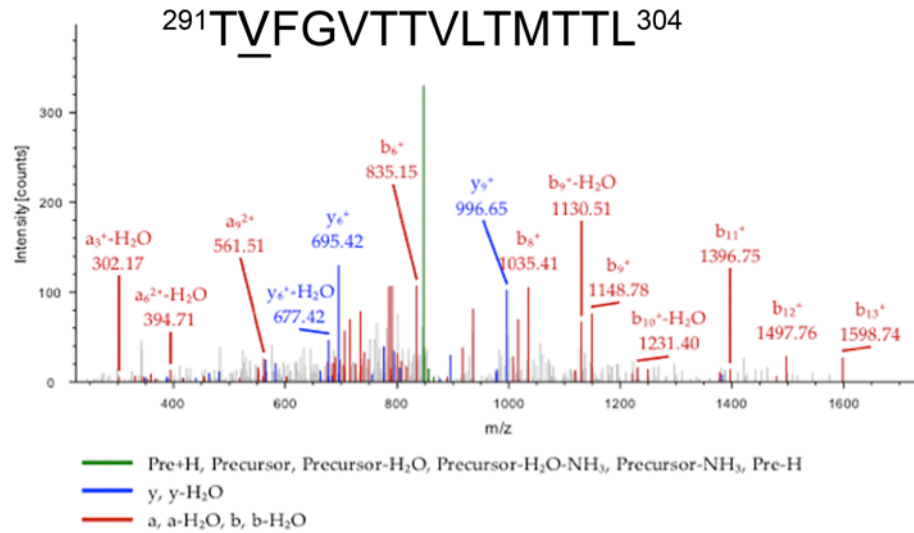
Fig S17. Identification of azisevoflurane adduct within the FLAG- $\alpha_1$  subunit of FLAG- $\alpha_1\beta_3$  GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu\text{M}$  azisevoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing aziisoflurane  $\alpha 1$ -P288 adduct. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.





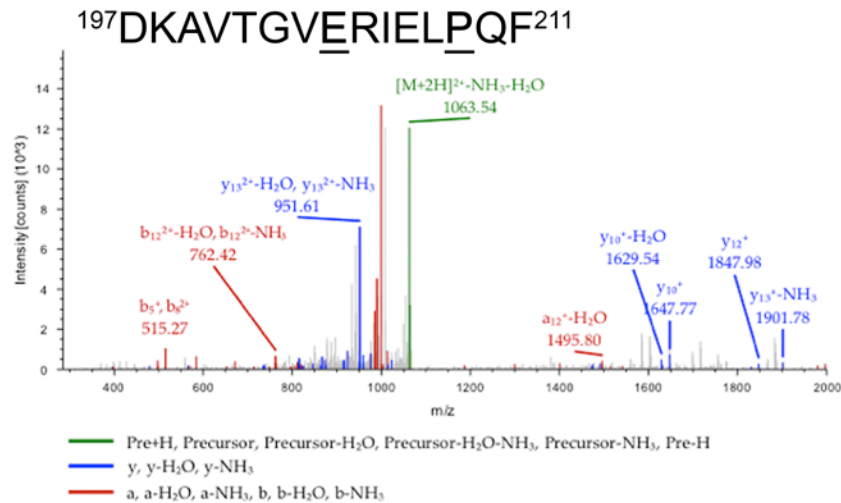
#1	a*	a <sup>2+</sup>	b*	b <sup>2+</sup>	Seq.	y*	y <sup>2+</sup>	#2
1	70.07	35.54	98.06	49.53	P			12
2	<b><u>403.07</u></b>	202.04	<b><u>431.07</u></b>	216.04	C-AziSev	1423.62	<b><u>712.32</u></b>	11
3	<b><u>516.16</u></b>	258.58	544.15	272.58	I	1090.62	<b><u>545.81</u></b>	10
4	<b><u>647.20</u></b>	324.10	<b><u>675.19</u></b>	338.10	M	977.53	489.27	9
5	<b><u>748.24</u></b>	374.63	776.24	388.62	T	<b><u>846.49</u></b>	423.75	8
6	<b><u>847.31</u></b>	424.16	<b><u>875.31</u></b>	<b><u>438.16</u></b>	V	<b><u>745.45</u></b>	373.23	7
7	<b><u>960.40</u></b>	<b><u>480.70</u></b>	<b><u>988.39</u></b>	<b><u>494.70</u></b>	I	<b><u>646.38</u></b>	323.69	6
8	1073.48	<b><u>537.24</u></b>	<b><u>1101.48</u></b>	<b><u>551.24</u></b>	L	<b><u>533.29</u></b>	267.15	5
9	1160.51	<b><u>580.76</u></b>	<b><u>1188.51</u></b>	<b><u>594.76</u></b>	S	<b><u>420.21</u></b>	210.61	4
10	1288.57	<b><u>644.79</u></b>	<b><u>1316.57</u></b>	<b><u>658.79</u></b>	Q	<b><u>333.18</u></b>	167.09	3
11	1387.64	694.32	1415.63	708.32	V	205.12	103.06	2
12					S	106.05	53.53	1

Fig S18. Identification of azisevoflurane adduct within the FLAG- $\alpha_1$  subunit of FLAG- $\alpha_1\beta_3$  GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu$ M azisevoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing aziisoflurane  $\alpha_1$ -C269 adduct. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.



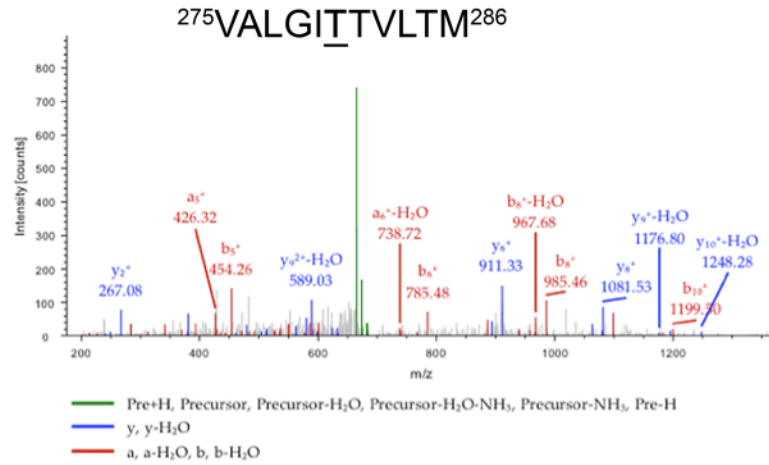
#1	a*	a <sup>2+</sup> *	b*	b <sup>2+</sup> *	Seq.	y*	y <sup>2+</sup> *	#2
1	74.06	37.53	102.05	51.53	T			14
2	403.13	202.07	431.12	216.06	V-AziSev	1628.75	814.88	13
3	550.19	275.60	<b>578.19</b>	289.60	F	1299.69	<b>650.35</b>	12
4	607.22	304.11	<b>635.21</b>	318.11	G	<b>1152.62</b>	<b>576.81</b>	11
5	<b>706.28</b>	<b>353.65</b>	<b>734.28</b>	<b>367.64</b>	V	1095.60	<b>548.30</b>	10
6	<b>807.33</b>	404.17	<b>835.33</b>	<b>418.17</b>	T	<b>996.53</b>	498.77	9
7	908.38	<b>454.69</b>	<b>936.37</b>	468.69	T	<b>895.48</b>	448.24	8
8	<b>1007.45</b>	504.23	<b>1035.44</b>	<b>518.23</b>	V	<b>794.43</b>	397.72	7
9	<b>1120.53</b>	<b>560.77</b>	<b>1148.53</b>	574.77	L	<b>695.36</b>	<b>348.19</b>	6
10	<b>1221.58</b>	611.29	<b>1249.58</b>	625.29	T	<b>582.28</b>	291.64	5
11	1368.62	<b>684.81</b>	<b>1396.61</b>	<b>698.81</b>	M-Oxidation	<b>481.23</b>	241.12	4
12	1469.66	<b>735.34</b>	<b>1497.66</b>	<b>749.33</b>	T	334.20	167.60	3
13	1570.71	<b>785.86</b>	<b>1598.71</b>	<b>799.86</b>	T	233.15	117.08	2
14					L	132.10	66.55	1

Fig S19. Identification of azisevoflurane adduct within the FLAG- $\alpha_1$  subunit of FLAG- $\alpha_1\beta_3$  GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu\text{M}$  azisevoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing aziisoflurane  $\alpha_1$ -V292 adduct. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.



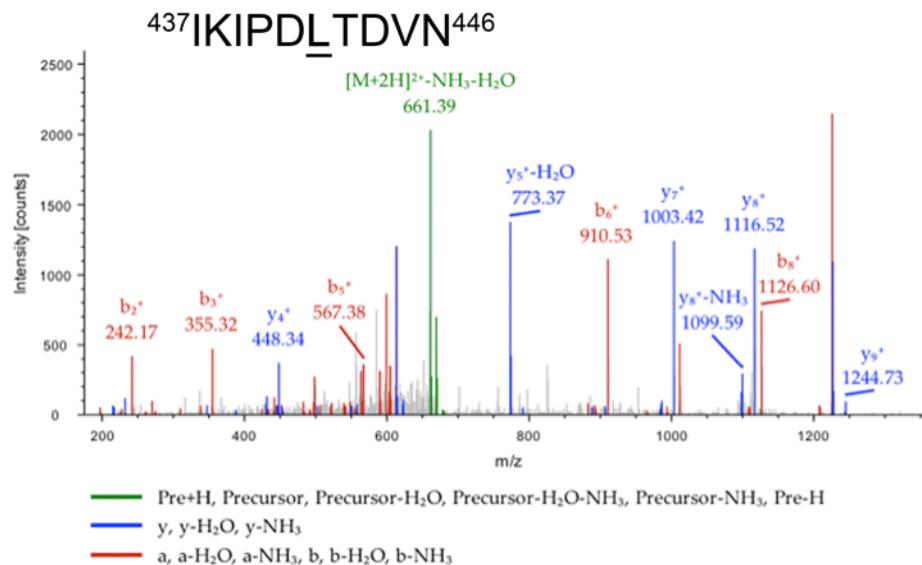
#1	a <sup>+</sup>	a <sup>2+</sup>	b <sup>+</sup>	b <sup>2+</sup>	Seq.	y <sup>+</sup>	y <sup>2+</sup>	#2
1	88.04	44.52	116.03	58.52	D			15
2	216.13	108.57	244.13	122.57	K	2046.89	1023.95	14
3	287.17	144.09	315.17	158.09	A	1918.79	959.90	13
4	386.24	193.62	414.23	207.62	V	1847.75	924.38	12
5	487.29	244.15	<b>515.28</b>	258.14	T	1748.69	874.85	11
6	544.31	272.66	572.30	286.66	G	1647.64	824.32	10
7	643.38	322.19	<b>671.37</b>	336.19	V	1590.62	795.81	9
8	<b>1002.42</b>	501.71	1030.41	<b>515.71</b>	E-AziSev	1491.55	746.28	8
9	1158.52	579.76	<b>1186.51</b>	593.76	R	1132.51	566.76	7
10	1271.60	636.31	<b>1299.60</b>	650.30	I	976.41	488.71	6
11	<b>1400.65</b>	700.83	1428.64	<b>714.82</b>	E	863.32	432.16	5
12	<b>1513.73</b>	757.37	<b>1541.72</b>	771.37	L	734.28	367.64	4
13	1840.78	<b>920.89</b>	1868.78	<b>934.89</b>	P-AziSev	621.20	311.10	3
14	1968.84	<b>984.92</b>	<b>1996.83</b>	<b>998.92</b>	Q	294.14	147.58	2
15					F	166.09	83.55	1

Fig S20. Identification of azisevoflurane adduct within the  $\beta_3$  subunit of FLAG- $\alpha_1\beta_3$  GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu$ M azisevoflurane. Mass spectrum and corresponding peptide fragment table of aziisoflurane peptide containing  $\beta_3$ -E204/  $\beta_3$ -P209 adducts. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.



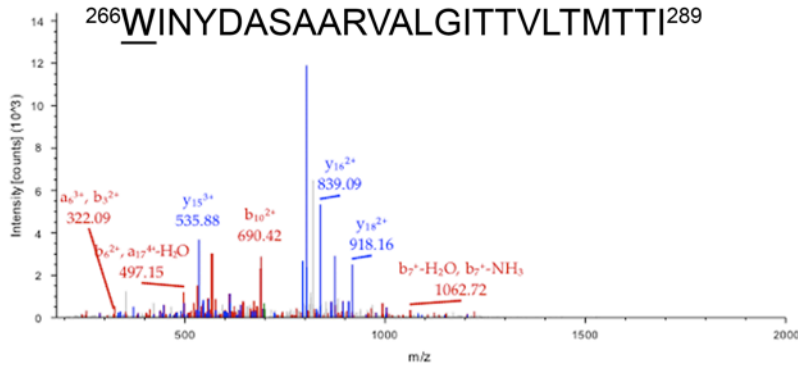
#1	a*	a <sup>+</sup> *	b*	b <sup>+</sup> *	Seq.	y*	y <sup>+</sup> *	#2
1	72.08	36.54	100.08	50.54	V			11
2	143.12	72.06	171.11	86.06	A	1265.57	<b>633.29</b>	10
3	256.20	128.60	<b>284.20</b>	142.60	L	<b>1194.54</b>	<b>597.77</b>	9
4	<b>313.22</b>	157.12	<b>341.22</b>	171.11	G	<b>1081.45</b>	541.23	8
5	<b>426.31</b>	<b>213.66</b>	<b>454.30</b>	<b>227.65</b>	I	1024.43	<b>512.72</b>	7
6	757.35	<b>379.18</b>	<b>785.35</b>	<b>393.18</b>	T-AziSev	<b>911.35</b>	456.18	6
7	858.40	<b>429.70</b>	<b>886.40</b>	<b>443.70</b>	T	<b>580.30</b>	290.65	5
8	<b>957.47</b>	<b>479.24</b>	<b>985.46</b>	<b>493.24</b>	V	<b>479.25</b>	<b>240.13</b>	4
9	1070.55	<b>535.78</b>	<b>1098.55</b>	<b>549.78</b>	L	<b>380.19</b>	190.60	3
10	1171.60	<b>586.30</b>	<b>1199.60</b>	<b>600.30</b>	T	<b>267.10</b>	134.05	2
11					M-Oxidation	166.05	83.53	1

Fig S21. Identification of azisevoflurane adduct within the  $\beta_3$  subunit of FLAG- $\alpha_1\beta_3$  GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu\text{M}$  azisevoflurane. Mass spectrum and corresponding peptide fragment table of aziisoflurane peptide containing  $\beta_3$ -T280(B),  $\beta_3$ -L442 adducts. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.



#1	a <sup>+</sup>	a <sup>2+</sup>	b <sup>+</sup>	b <sup>2+</sup>	Seq.	y <sup>+</sup>	y <sup>2+</sup>	#2
1	86.10	43.55	114.09	57.55	I			10
2	214.19	107.60	<b><u>242.19</u></b>	121.60	K	<b><u>1244.54</u></b>	<b><u>622.78</u></b>	9
3	327.28	164.14	<b><u>355.27</u></b>	178.14	I	<b><u>1116.45</u></b>	<b><u>558.73</u></b>	8
4	<b><u>424.33</u></b>	212.67	<b><u>452.32</u></b>	<b><u>226.67</u></b>	P	<b><u>1003.37</u></b>	<b><u>502.19</u></b>	7
5	<b><u>539.36</u></b>	<b><u>270.18</u></b>	<b><u>567.35</u></b>	284.18	D	<b><u>906.31</u></b>	<b><u>453.66</u></b>	6
6	<b><u>882.44</u></b>	<b><u>441.72</u></b>	<b><u>910.43</u></b>	455.72	L-AziSev	<b><u>791.29</u></b>	396.15	5
7	<b><u>983.48</u></b>	<b><u>492.25</u></b>	<b><u>1011.48</u></b>	<b><u>506.24</u></b>	T	<b><u>448.20</u></b>	224.61	4
8	<b><u>1098.51</u></b>	<b><u>549.76</u></b>	<b><u>1126.51</u></b>	<b><u>563.76</u></b>	D	<b><u>347.16</u></b>	174.08	3
9	1197.58	<b><u>599.29</u></b>	<b><u>1225.58</u></b>	<b><u>613.29</u></b>	V	<b><u>232.13</u></b>	116.57	2
10					N	133.06	67.03	1

Fig S22. Identification of aziseovflurane adduct within the  $\beta_3$  subunit of FLAG- $\alpha_1\beta_3$  GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu$ M aziseovflurane. Mass spectrum and corresponding peptide fragment table of aziisovflurane peptide containing  $\beta_3$ -L442 adduct. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.

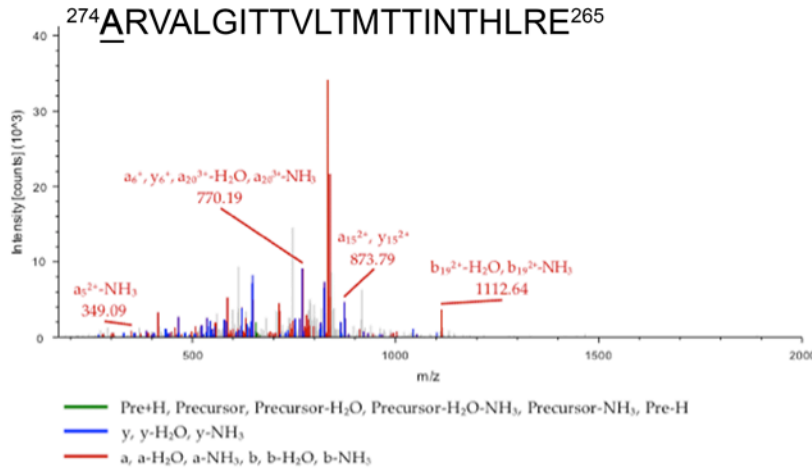


— Pre+H, Precursor, Precursor-H<sub>2</sub>O, Precursor-H<sub>2</sub>O-NH<sub>3</sub>, Precursor-NH<sub>3</sub>, Pre-H  
— y, y-H<sub>2</sub>O, y-NH<sub>3</sub>  
— a, a-H<sub>2</sub>O, a-NH<sub>3</sub>, b, b-H<sub>2</sub>O, b-NH<sub>3</sub>

#1	a <sup>+</sup>	a <sup>2+</sup>	a <sup>3+</sup>	a <sup>4+</sup>	b <sup>+</sup>	b <sup>2+</sup>	b <sup>3+</sup>	b <sup>4+</sup>	Seq.	y <sup>+</sup>	y <sup>2+</sup>	y <sup>3+</sup>	y <sup>4+</sup>	#2
1	389.09	195.05	130.37	98.03	417.08	209.05	139.70	105.03	W-AziSev					24
2	502.17	<b>251.59</b>	168.06	126.30	<b>530.17</b>	265.59	177.39	133.30	I	2411	<b>1206</b>	<b>804</b>	<b>604</b>	23
3	<b>616.22</b>	308.61	206.08	154.81	<b>644.21</b>	<b>322.61</b>	215.41	161.81	N	2298	1150	767	575	22
4	<b>779.28</b>	390.14	260.43	195.58	<b>807.27</b>	<b>404.14</b>	269.76	202.57	Y	2184	1093	729	<b>547</b>	21
5	<b>894.31</b>	<b>447.66</b>	298.77	224.33	<b>922.30</b>	<b>461.65</b>	308.11	231.33	D	2021	1011	<b>674</b>	<b>506</b>	20
6	<b>965.34</b>	483.18	<b>322.45</b>	242.09	<b>993.34</b>	<b>497.17</b>	331.78	249.09	A	1906	<b>954</b>	<b>636</b>	477	19
7	1052.38	<b>526.69</b>	<b>351.46</b>	263.85	1080.37	<b>540.69</b>	360.80	270.85	S	1835	<b>918</b>	<b>612</b>	460	18
8	<b>1123.41</b>	<b>562.21</b>	375.14	281.61	<b>1151.41</b>	<b>576.21</b>	384.47	<b>288.61</b>	A	1748	<b>875</b>	583	438	17
9	1194.45	<b>597.73</b>	398.82	299.37	<b>1222.45</b>	<b>611.73</b>	<b>408.15</b>	<b>306.37</b>	A	1677	<b>839</b>	<b>560</b>	420	16
10	1350.55	<b>675.78</b>	450.86	338.39	1378.55	<b>689.78</b>	460.19	345.39	R	1606	<b>803</b>	<b>536</b>	402	15
11	1449.62	<b>725.31</b>	483.88	363.16	1477.61	739.31	<b>493.21</b>	370.16	V	1450	<b>725</b>	484	363	14
12	1520.66	760.83	<b>507.56</b>	<b>380.92</b>	1548.65	<b>774.83</b>	<b>516.89</b>	387.92	A	1351	<b>676</b>	451	<b>338</b>	13
13	1633.74	817.37	<b>545.25</b>	409.19	1661.74	<b>831.37</b>	<b>554.58</b>	416.19	L	1280	<b>640</b>	427	321	12
14	1690.76	<b>845.88</b>	<b>564.26</b>	<b>423.45</b>	1718.76	859.88	573.59	430.44	G	1167	<b>584</b>	390	292	11
15	1803.85	902.43	<b>601.95</b>	451.72	1831.84	<b>916.42</b>	<b>611.29</b>	458.72	I	1110	<b>555</b>	<b>371</b>	278	10
16	1904.89	<b>952.95</b>	<b>635.64</b>	476.98	1932.89	966.95	<b>644.97</b>	483.98	T	997	<b>499</b>	<b>333</b>	250	9
17	2005.94	<b>1003.47</b>	<b>669.32</b>	502.24	2033.94	<b>1017.47</b>	<b>678.65</b>	<b>509.24</b>	T	<b>895</b>	<b>448</b>	299	225	8
18	2105.01	1053.01	702.34	527.01	2133.01	1067.01	711.67	<b>534.01</b>	V	<b>794</b>	398	265	199	7
19	2218.09	1109.55	740.04	<b>555.28</b>	2246.09	1123.55	749.37	<b>562.28</b>	L	<b>695</b>	<b>348</b>	232	175	6
20	2319.14	1160.07	<b>773.72</b>	<b>580.54</b>	2347.14	1174.07	783.05	<b>587.54</b>	T	582	292	195	146	5
21	2466.18	1233.59	822.73	617.30	2494.17	1247.59	832.06	<b>624.30</b>	M-Oxidation	<b>481</b>	241	161	121	4
22	2567.23	1284.12	<b>856.41</b>	<b>642.56</b>	2595.22	1298.11	<b>865.74</b>	649.56	T	<b>334</b>	168	112	84	3
23	2668.27	1334.64	<b>890.10</b>	<b>667.82</b>	2696.27	1348.64	899.43	<b>674.82</b>	T	233	117	78	59	2
24									I	132	67	45	34	1

Fig S23. Identification of azisevoflurane adduct within the  $\beta_3$  subunit of FLAG- $\alpha_1\beta_3$  GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu$ M azisevoflurane. Mass spectrum and corresponding peptide fragment table of aziisoflurane peptide containing  $\beta_3$ -W226 adduct. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.

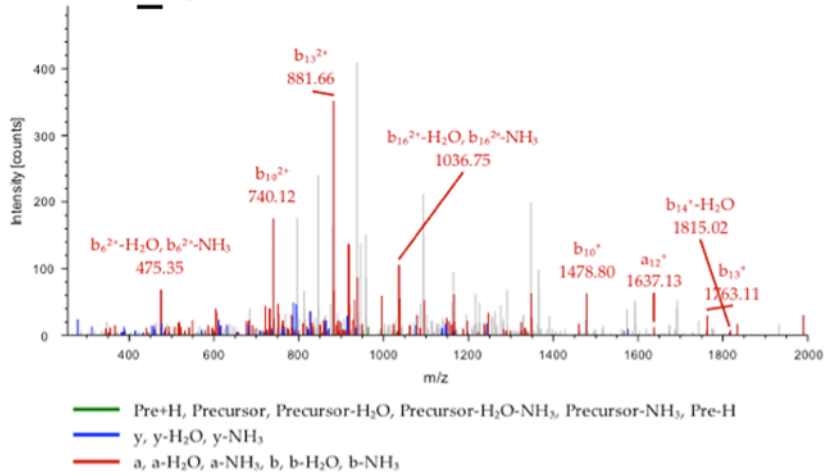




#1	a <sup>+</sup>	a <sup>2+</sup>	a <sup>3+</sup>	a <sup>4+</sup>	b <sup>+</sup>	b <sup>2+</sup>	b <sup>3+</sup>	b <sup>4+</sup>	Seq.	y <sup>+</sup>	y <sup>2+</sup>	y <sup>3+</sup>	y <sup>4+</sup>	#2
1	274.05	137.53	92.02	69.27	<b>302.04</b>	151.52	101.35	76.27	A-AziSev					22
2	430.15	215.58	144.05	108.29	458.14	229.58	153.39	115.29	R	2357.29	1179.15	<b>786.43</b>	<b>590.08</b>	21
3	529.22	265.11	177.08	133.06	<b>557.21</b>	<b>279.11</b>	186.41	140.06	V	2201.18	<b>1101.10</b>	<b>734.40</b>	<b>551.05</b>	20
4	<b>600.25</b>	<b>300.63</b>	200.76	150.82	<b>628.25</b>	314.63	210.09	157.82	A	2102.12	<b>1051.56</b>	701.38	<b>526.28</b>	19
5	<b>713.34</b>	<b>357.17</b>	238.45	179.09	<b>741.33</b>	371.17	247.78	186.09	L	2031.08	1016.04	677.70	<b>508.53</b>	18
6	<b>770.36</b>	<b>385.68</b>	257.46	193.35	<b>798.35</b>	<b>399.68</b>	266.79	200.34	G	1918.00	<b>959.50</b>	640.00	<b>480.25</b>	17
7	<b>883.44</b>	442.23	295.15	221.62	<b>911.44</b>	<b>456.22</b>	304.48	228.62	I	1860.97	<b>930.99</b>	<b>621.00</b>	<b>466.00</b>	16
8	984.49	<b>492.75</b>	328.84	246.88	1012.49	<b>506.75</b>	338.17	253.88	T	1747.89	<b>874.45</b>	<b>583.30</b>	437.73	15
9	1085.54	<b>543.27</b>	362.52	272.14	<b>1113.53</b>	<b>557.27</b>	<b>371.85</b>	<b>279.14</b>	T	1646.84	<b>823.92</b>	<b>549.62</b>	412.47	14
10	1184.61	<b>592.81</b>	395.54	296.91	1212.60	<b>606.80</b>	<b>404.87</b>	303.91	V	1545.79	<b>773.40</b>	515.94	387.20	13
11	1297.69	<b>649.35</b>	<b>433.24</b>	325.18	1325.69	663.35	<b>442.57</b>	332.18	L	1446.73	723.87	<b>482.91</b>	362.44	12
12	1398.74	<b>699.87</b>	<b>466.92</b>	350.44	1426.73	<b>713.87</b>	476.25	<b>357.44</b>	T	1333.64	667.32	445.22	334.17	11
13	1545.77	<b>773.39</b>	515.93	387.20	1573.77	<b>787.39</b>	<b>525.26</b>	394.20	M-Oxidation	1232.59	616.80	411.54	308.90	10
14	1646.82	<b>823.91</b>	<b>549.61</b>	412.46	1674.82	<b>837.91</b>	558.94	419.46	T	1085.56	<b>543.28</b>	362.52	272.15	9
15	1747.87	<b>874.44</b>	<b>583.29</b>	437.72	1775.86	888.44	<b>592.63</b>	444.72	T	984.51	<b>492.76</b>	328.84	246.88	8
16	1860.95	<b>930.98</b>	<b>620.99</b>	<b>465.99</b>	1888.95	<b>944.98</b>	<b>630.32</b>	<b>472.99</b>	I	<b>883.46</b>	<b>442.24</b>	295.16	221.62	7
17	1975.98	<b>988.49</b>	<b>659.33</b>	494.75	2003.98	<b>1002.49</b>	668.66	501.75	N-Deamidated	<b>770.38</b>	<b>385.69</b>	257.46	193.35	6
18	2077.03	1039.02	693.01	<b>520.01</b>	2105.02	<b>1053.02</b>	702.35	<b>527.01</b>	T	<b>655.35</b>	328.18	219.12	164.59	5
19	2214.09	1107.55	<b>738.70</b>	<b>554.28</b>	2242.08	1121.54	<b>748.03</b>	561.28	H	<b>554.30</b>	277.66	185.44	139.33	4
20	2327.17	1164.09	<b>776.40</b>	<b>582.55</b>	2355.17	1178.09	<b>785.73</b>	<b>589.55</b>	L	417.25	209.13	139.75	105.07	3
21	2483.27	1242.14	<b>828.43</b>	<b>621.57</b>	2511.27	1256.14	<b>837.76</b>	<b>628.57</b>	R	304.16	152.58	102.06	76.80	2
22									E	148.06	74.53	50.03	37.77	1

Fig S24. Identification of aziseovflurane adduct within the  $\beta_3$  subunit of FLAG- $\alpha_1\beta_3$  GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu$ M aziseovflurane. Mass spectrum and corresponding peptide fragment table of aziisovflurane peptide containing  $\beta_3$ -A274 adduct. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.

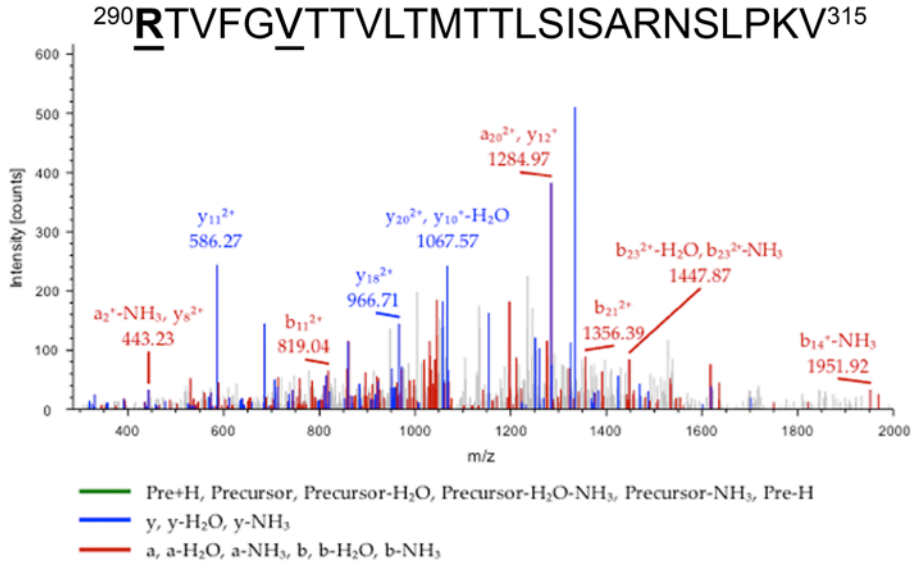
276 SQVSWFLNRESVPARTVFGVTTVL 299



#1	a <sup>+</sup>	a <sup>2+</sup>	a <sup>3+</sup>	b <sup>+</sup>	b <sup>2+</sup>	b <sup>3+</sup>	Seq.	y <sup>+</sup>	y <sup>2+</sup>	y <sup>3+</sup>	#2
1	290.04	145.52	97.35	318.04	159.52	106.68	S-AziSe				24
2	419.08	210.05	140.37	447.08	224.04	149.70	Q-Deamidated	2608.38	1304.69	870.13	23
3	518.15	259.58	173.39	546.15	273.58	182.72	V	2479.33	1240.17	827.12	22
4	605.19	303.10	202.40	633.18	317.09	211.73	S	2380.27	1190.64	794.09	21
5	752.25	376.63	251.42	780.25	390.63	260.75	F	2293.23	1147.12	765.08	20
6	938.33	469.67	313.45	966.33	483.67	322.78	W	2146.17	1073.59	716.06	19
7	1051.42	526.21	351.14	1079.41	540.21	360.48	L	1960.09	980.55	654.03	18
8	1166.44	583.73	389.49	1194.44	597.72	398.82	N-Deamidated	1847.00	924.00	616.34	17
9	1322.55	661.78	441.52	1350.54	675.77	450.85	R	1731.98	866.49	578.00	16
10	1451.59	726.30	484.53	1479.58	740.29	493.87	E	1575.87	788.44	525.96	15
11	1538.62	769.81	513.54	1566.61	783.81	522.88	S	1446.83	723.92	482.95	14
12	1637.69	819.35	546.57	1665.68	833.35	555.90	V	1359.80	680.40	453.94	13
13	1734.74	867.87	578.92	1762.74	881.87	588.25	P	1260.73	630.87	420.92	12
14	1805.78	903.39	602.60	1833.77	917.39	611.93	A	1163.68	582.34	388.56	11
15	1961.88	981.44	654.63	1989.87	995.44	663.96	R	1092.64	546.82	364.89	10
16	2062.93	1031.97	688.31	2090.92	1045.96	697.65	T	936.54	468.77	312.85	9
17	2162.00	1081.50	721.34	2189.99	1095.50	730.67	V	835.49	418.25	279.17	8
18	2309.06	1155.04	770.36	2337.06	1169.03	779.69	F	736.42	368.72	246.15	7
19	2366.09	1183.55	789.37	2394.08	1197.54	798.70	G	589.36	295.18	197.12	6
20	2465.15	1233.08	822.39	2493.15	1247.08	831.72	V	532.33	266.67	178.12	5
21	2566.20	1283.60	856.07	2594.20	1297.60	865.40	T	433.27	217.14	145.09	4
22	2667.25	1334.13	889.75	2695.24	1348.13	899.09	T	332.22	166.61	111.41	3
23	2766.32	1383.66	922.78	2794.31	1397.66	932.11	V	231.17	116.09	77.73	2
24							L	132.10	66.55	44.71	1

Appendix Fig S25. Identification of azisevoflurane adducts within the FLAG- $\alpha_1$  subunit of FLAG- $\alpha_1\beta_3\gamma_{2L}$ -L3-1D4 GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu$ M azisevoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing azisevoflurane  $\alpha_1$ -S276 adduct. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.



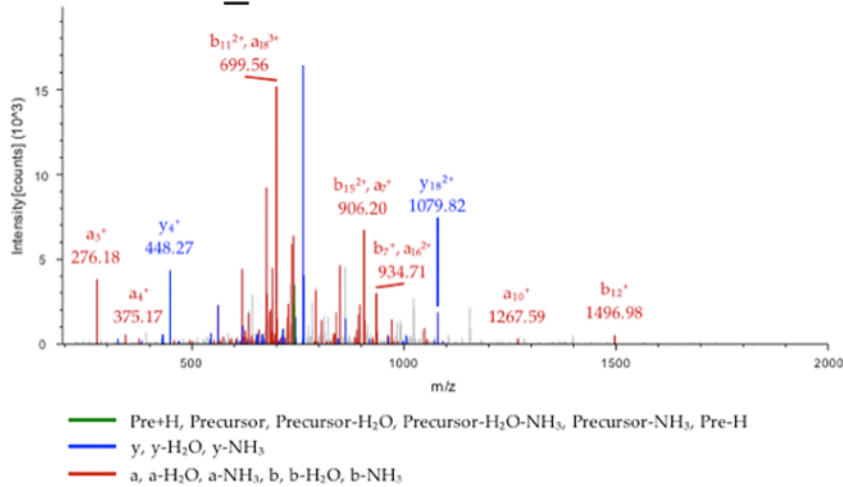


#1	a*	a <sup>2+</sup>	a <sup>3+</sup>	b*	b <sup>2+</sup>	b <sup>3+</sup>	Seq.	y*	y <sup>2+</sup>	y <sup>3+</sup>	#2
1	359.11	180.06	120.38	387.11	194.06	129.71	R-AziSev				26
2	460.16	230.58	154.06	488.15	244.58	163.39	T	2867.45	1434.23	956.49	25
3	559.23	280.12	187.08	587.22	294.11	196.41	V	2766.40	1383.71	922.81	24
4	706.30	353.65	236.10	734.29	367.65	245.44	F	2667.33	1334.17	889.78	23
5	763.32	382.16	255.11	791.31	396.16	264.44	G	2520.27	1260.64	840.76	22
6	1092.38	546.70	364.80	1120.38	560.69	374.13	V-AziSev	2463.25	1232.13	821.75	21
7	1193.43	597.22	398.48	1221.43	611.22	407.81	T	2134.18	1067.59	712.06	20
8	1294.48	647.74	432.16	1322.47	661.74	441.50	T	2033.13	1017.07	678.38	19
9	1393.55	697.28	465.19	1421.54	711.27	474.52	V	1932.08	966.55	644.70	18
10	1506.63	753.82	502.88	1534.63	767.82	512.21	L	1833.02	917.01	611.68	17
11	1607.68	804.34	536.56	1635.67	818.34	545.90	T	1719.93	860.47	573.98	16
12	1738.72	869.86	580.24	1766.71	883.86	589.58	M	1618.88	809.95	540.30	15
13	1839.77	920.39	613.93	1867.76	934.38	623.26	T	1487.84	744.43	496.62	14
14	1940.81	970.91	647.61	1968.81	984.91	656.94	T	1386.80	693.90	462.94	13
15	2053.90	1027.45	685.30	2081.89	1041.45	694.64	L	1285.75	643.38	429.25	12
16	2140.93	1070.97	714.32	2168.93	1084.97	723.65	S	1172.66	586.84	391.56	11
17	2254.02	1127.51	752.01	2282.01	1141.51	761.34	I	1085.63	543.32	362.55	10
18	2341.05	1171.03	781.02	2369.04	1185.02	790.35	S	972.55	486.78	324.85	9
19	2412.08	1206.55	804.70	2440.08	1220.54	814.03	A	885.52	443.26	295.84	8
20	2568.19	1284.60	856.73	2596.18	1298.59	866.06	R	814.48	407.74	272.16	7
21	2683.21	1342.11	895.08	2711.21	1356.11	904.41	N-Deamidated	658.38	329.69	220.13	6
22	2770.24	1385.63	924.09	2798.24	1399.62	933.42	S	543.35	272.18	181.79	5
23	2883.33	1442.17	961.78	2911.32	1456.17	971.11	L	456.32	228.66	152.78	4
24	2980.38	1490.69	994.13	3008.38	1504.69	1003.46	P	343.23	172.12	115.08	3
25	3108.48	1554.74	1036.83	3136.47	1568.74	1046.16	K	246.18	123.59	82.73	2
26							V	118.09	59.55	40.03	1

Appendix Fig S26. Identification of azisevoflurane adducts within the FLAG- $\alpha_1$  subunit of FLAG- $\alpha_1\beta_3\gamma_{2L}$ -L3-1D4 GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu$ M azisevoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing azisevoflurane  $\alpha_1$ -R290/  $\alpha_1$ -V295 adduct. Residue modified by photolabel derivative is in bold and underlined.

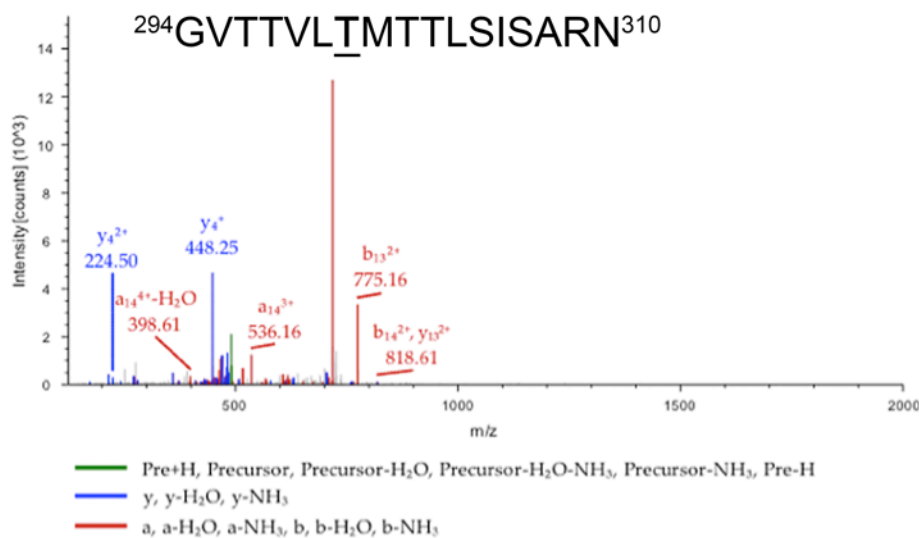
Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.

<sup>292</sup>VFGVTTVLTMTTLLSISARN<sup>310</sup>



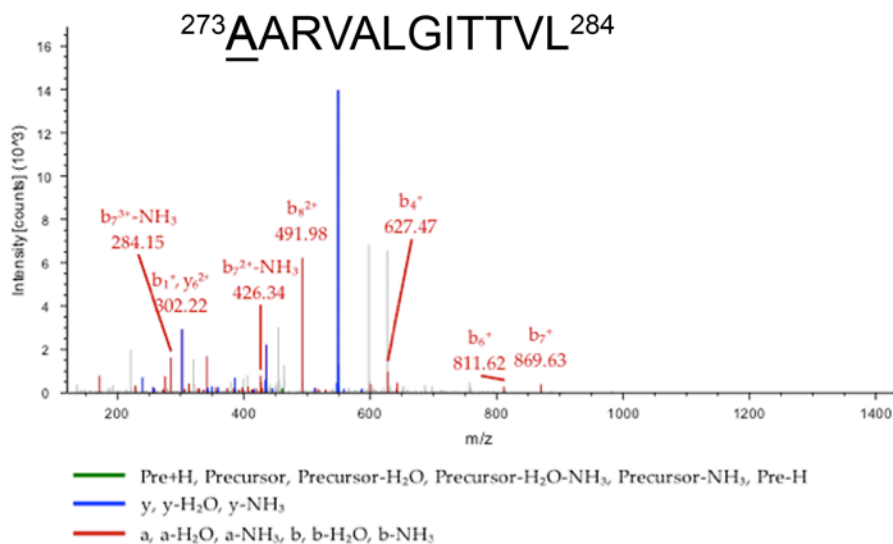
#1	a*	a <sup>2+</sup>	a <sup>3+</sup>	b*	b <sup>2+</sup>	b <sup>3+</sup>	Seq.	y*	y <sup>2+</sup>	y <sup>3+</sup>	#2
1	72.08	36.54	24.70	100.08	50.54	34.03	V				19
2	219.15	110.08	73.72	247.14	124.08	83.05	F	2159.00	<b>1080.00</b>	<b>720.34</b>	18
3	<b>276.17</b>	138.59	92.73	304.17	152.59	102.06	G	2011.93	<b>1006.47</b>	<b>671.31</b>	17
4	<b>375.24</b>	188.12	125.75	403.23	202.12	135.08	V	1954.91	977.96	<b>652.31</b>	16
5	706.28	353.65	236.10	<b>734.28</b>	367.64	245.43	T-AziSev	1855.84	928.42	<b>619.28</b>	15
6	807.33	404.17	269.78	<b>835.33</b>	418.17	279.11	T	1524.79	<b>762.90</b>	508.94	14
7	<b>906.40</b>	453.70	302.81	<b>934.40</b>	467.70	312.14	V	1423.75	<b>712.38</b>	475.25	13
8	1019.48	510.25	340.50	<b>1047.48</b>	524.24	349.83	L	1324.68	<b>662.84</b>	442.23	12
9	1120.53	<b>560.77</b>	374.18	1148.53	<b>574.77</b>	383.51	T	1211.59	<b>606.30</b>	404.54	11
10	<b>1267.57</b>	<b>634.29</b>	423.19	1295.56	648.29	<b>432.53</b>	M-Oxidation	1110.55	555.78	370.85	10
11	1368.62	<b>684.81</b>	456.88	1396.61	<b>698.81</b>	466.21	T	<b>963.51</b>	482.26	321.84	9
12	1469.66	<b>735.34</b>	490.56	<b>1497.66</b>	749.33	<b>499.89</b>	T	<b>862.46</b>	<b>431.74</b>	288.16	8
13	1582.75	<b>791.88</b>	528.25	1610.74	<b>805.87</b>	537.59	L	<b>761.42</b>	<b>381.21</b>	254.48	7
14	1669.78	<b>835.39</b>	557.26	1697.77	<b>849.39</b>	<b>566.60</b>	S	648.33	<b>324.67</b>	216.78	6
15	1782.86	<b>891.94</b>	<b>594.96</b>	1810.86	<b>905.93</b>	<b>604.29</b>	I	<b>561.30</b>	281.15	187.77	5
16	1869.90	<b>935.45</b>	<b>623.97</b>	1897.89	949.45	<b>633.30</b>	S	<b>448.22</b>	224.61	150.08	4
17	1940.93	<b>970.97</b>	<b>647.65</b>	1968.93	<b>984.97</b>	<b>656.98</b>	A	361.18	181.10	121.07	3
18	2097.03	1049.02	<b>699.68</b>	2125.03	1063.02	<b>709.01</b>	R	290.15	145.58	97.39	2
19							N-Deamidated	134.04	67.53	45.35	1

Appendix Fig S27. Identification of azisevoflurane adducts within the FLAG- $\alpha_1$  subunit of FLAG- $\alpha_1\beta_3\gamma_{2L}$ -L3-1D4 GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu$ M azisevoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing azisevoflurane - T296 adduct. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.



#1	a*	a <sup>2+</sup>	a <sup>3+</sup>	a <sup>4+</sup>	b*	b <sup>2+</sup>	b <sup>3+</sup>	b <sup>4+</sup>	Seq.	y*	y <sup>2+</sup>	y <sup>3+</sup>	y <sup>4+</sup>	#2
1	30.03	15.52	10.68	8.26	58.03	29.52	20.01	15.26	G					17
2	129.10	65.05	43.71	33.03	157.10	79.05	53.04	40.03	V	1938.91	969.96	646.98	<b>485.48</b>	16
3	230.15	115.58	77.39	58.29	258.14	129.58	86.72	65.29	T	1839.84	920.43	<b>613.95</b>	<b>460.72</b>	15
4	331.20	166.10	111.07	83.55	<b>359.19</b>	180.10	120.40	90.55	T	1738.80	869.90	<b>580.27</b>	<b>435.45</b>	14
5	<b>430.27</b>	<b>215.64</b>	144.09	108.32	<b>458.26</b>	229.63	153.43	115.32	V	1637.75	<b>819.38</b>	546.59	<b>410.19</b>	13
6	543.35	<b>272.18</b>	181.79	136.59	571.35	286.18	191.12	143.59	L	1538.68	769.84	513.57	385.43	12
7	874.40	<b>437.70</b>	292.14	219.35	902.39	451.70	301.47	226.35	T-AziSev	1425.60	713.30	<b>475.87</b>	357.15	11
8	1005.44	503.22	335.82	252.11	1033.43	<b>517.22</b>	345.15	259.11	M	1094.55	547.78	365.52	274.39	10
9	1106.48	553.75	369.50	277.38	1134.48	<b>567.74</b>	378.83	284.38	T	963.51	<b>482.26</b>	321.84	<b>241.63</b>	9
10	1207.53	604.27	403.18	302.64	1235.53	<b>618.27</b>	<b>412.51</b>	309.64	T	862.46	<b>431.74</b>	288.16	<b>216.37</b>	8
11	1320.62	660.81	<b>440.88</b>	330.91	1348.61	<b>674.81</b>	<b>450.21</b>	337.91	L	<b>761.42</b>	381.21	254.48	191.11	7
12	1407.65	<b>704.33</b>	<b>469.89</b>	352.67	1435.64	<b>718.32</b>	<b>479.22</b>	<b>359.67</b>	S	648.33	324.67	216.78	162.84	6
13	1520.73	<b>760.87</b>	<b>507.58</b>	380.94	1548.73	<b>774.87</b>	<b>516.91</b>	387.94	I	561.30	<b>281.15</b>	187.77	141.08	5
14	1607.76	804.39	<b>536.59</b>	402.70	1635.76	<b>818.38</b>	545.92	<b>409.70</b>	S	<b>448.22</b>	<b>224.61</b>	150.08	112.81	4
15	1678.80	839.90	560.27	420.46	1706.80	853.90	<b>569.60</b>	<b>427.45</b>	A	361.18	181.10	121.07	91.05	3
16	1834.90	917.95	612.31	<b>459.48</b>	1862.90	931.95	<b>621.64</b>	<b>466.48</b>	R	290.15	145.58	97.39	73.29	2
17									N-Deamidated	134.04	67.53	45.35	34.27	1

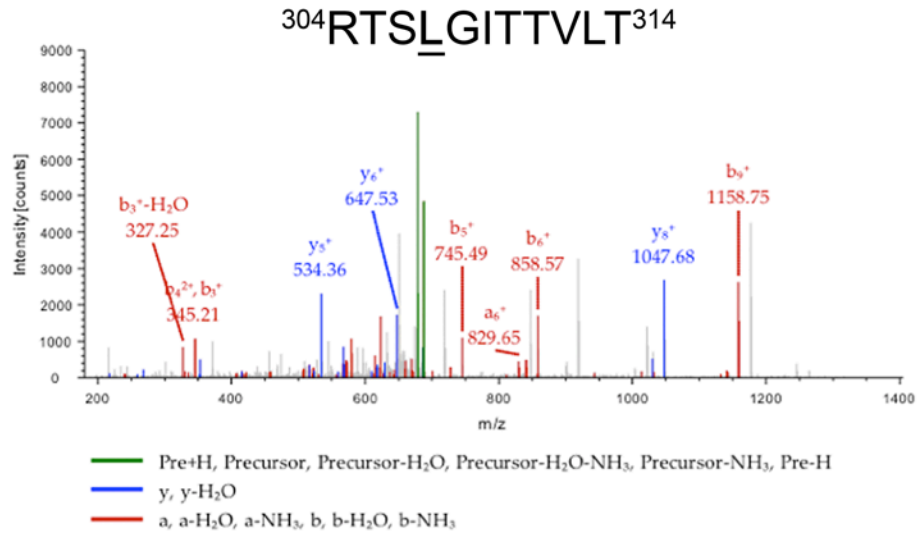
Appendix Fig S28. Identification of azisevoflurane adducts within the FLAG- $\alpha_1$  subunit of FLAG- $\alpha_1\beta_3\gamma_{2L}$ -L3-1D4 GABA<sub>A</sub> receptors photolabeled in the presence of 30  $\mu\text{M}$  azisevoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing azisevoflurane  $\alpha_1$ -T300 adduct. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.



#1	a*	a <sup>2+</sup>	a <sup>3+</sup>	b*	b <sup>2+</sup>	b <sup>3+</sup>	Seq.	y*	y <sup>2+</sup>	y <sup>3+</sup>	#2
1	274.05	137.53	92.02	<b>302.04</b>	151.52	101.35	A-AziSev				12
2	345.08	173.05	115.70	<b>373.08</b>	187.04	125.03	A	1113.70	<b>557.35</b>	371.90	11
3	501.19	251.10	167.73	<b>529.18</b>	265.09	177.06	R	1042.66	521.83	348.23	10
4	<b>600.25</b>	300.63	200.76	<b>628.25</b>	314.63	210.09	V	886.56	<b>443.78</b>	296.19	9
5	671.29	<b>336.15</b>	224.44	699.29	<b>350.15</b>	233.77	A	787.49	394.25	263.17	8
6	784.38	<b>392.69</b>	262.13	<b>812.37</b>	<b>406.69</b>	<b>271.46</b>	L	716.46	<b>358.73</b>	<b>239.49</b>	7
7	841.40	421.20	281.14	<b>869.39</b>	<b>435.20</b>	290.47	G	603.37	<b>302.19</b>	201.80	6
8	954.48	477.74	318.83	982.48	<b>491.74</b>	<b>328.16</b>	I	<b>546.35</b>	273.68	182.79	5
9	1055.53	528.27	352.51	1083.52	542.27	361.85	T	<b>433.27</b>	217.14	145.09	4
10	1156.58	578.79	<b>386.20</b>	1184.57	592.79	395.53	T	332.22	166.61	111.41	3
11	1255.64	628.33	<b>419.22</b>	1283.64	<b>642.32</b>	<b>428.55</b>	V	231.17	116.09	77.73	2
12							L	132.10	66.55	44.71	1

Fig S29. Identification of azisevoflurane adduct within the  $\beta_3$  subunits of FLAG- $\alpha_1\beta_3\gamma_{2L}$ -L3-1D4 GABA<sub>A</sub> receptors photolabeled in the presence of 30 $\mu$ M azisevoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing azisevoflurane  $\alpha_1$ -A273 adduct within the  $\beta_3$  subunit. Residue modified by photolabel derivative is in bold and underlined.

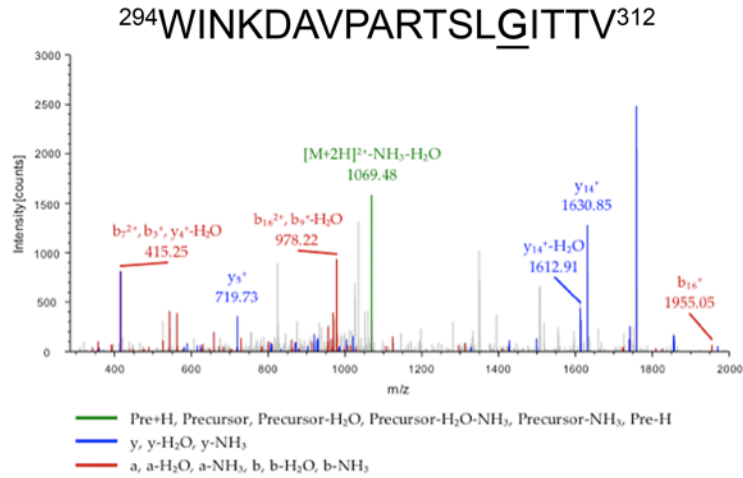
Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.



#1	a*	a <sup>2+</sup>	b*	b <sup>2+</sup>	Seq.	y*	y <sup>2+</sup>	#2
1	129.11	65.06	157.11	79.06	R			11
2	230.16	115.58	258.16	129.58	T	1235.58	618.29	10
3	317.19	159.10	345.19	173.10	S	1134.53	567.77	9
4	660.28	330.64	688.27	344.64	L-AziSev	1047.50	524.25	8
5	717.30	359.15	745.29	373.15	G	704.42	352.71	7
6	830.38	415.69	858.38	429.69	I	647.40	324.20	6
7	931.43	466.22	959.42	480.22	T	534.31	267.66	5
8	1032.48	516.74	1060.47	530.74	T	433.27	217.14	4
9	1131.54	566.28	1159.54	580.27	V	332.22	166.61	3
10	1244.63	622.82	1272.62	636.82	L	233.15	117.08	2
11					T	120.07	60.54	1

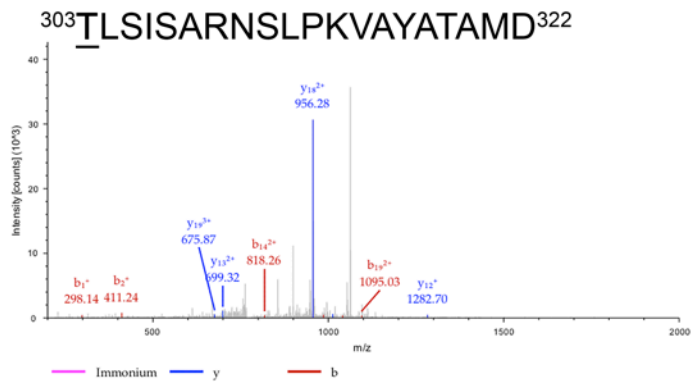
Fig S30. Identification of azisevoflurane adducts within the  $\gamma_{2L}$ -L3-1D4 subunits of FLAG- $\alpha_1\beta_3\gamma_{2L}$ -L3-1D4 GABA<sub>A</sub> receptors photolabeled in the presence of 30 $\mu$ M azisevoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing azisevoflurane  $\gamma_{2L}$ -L307 adduct. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.





#1	a*	a <sup>2+</sup>	b*	b <sup>2+</sup>	Seq.	y*	y <sup>2+</sup>	#2
1	159.09	80.05	187.09	94.05	W			18
2	272.18	136.59	300.17	150.59	I	1986.98	993.99	17
3	387.20	194.10	<u>415.20</u>	208.10	N-Deamidated	1873.89	937.45	16
4	515.30	258.15	<u>543.29</u>	272.15	K	<u>1758.87</u>	<u>879.94</u>	15
5	<u>630.32</u>	315.67	<u>658.32</u>	329.66	D	<u>1630.77</u>	815.89	14
6	<u>701.36</u>	351.18	<u>729.36</u>	365.18	A	1515.75	758.38	13
7	<u>800.43</u>	400.72	828.43	<u>414.72</u>	V	1444.71	722.86	12
8	897.48	<u>449.25</u>	925.48	463.24	P	1345.64	673.32	11
9	<u>968.52</u>	484.76	<u>996.51</u>	498.76	A	1248.59	<u>624.80</u>	10
10	<u>1124.62</u>	<u>562.81</u>	1152.62	<u>576.81</u>	R	1177.55	<u>589.28</u>	9
11	1225.67	613.34	1253.66	<u>627.34</u>	T	<u>1021.45</u>	511.23	8
12	<u>1312.70</u>	656.85	1340.70	<u>670.85</u>	S	<u>920.40</u>	460.70	7
13	<u>1425.78</u>	713.40	1453.78	727.39	L	<u>833.37</u>	417.19	6
14	1712.80	856.91	<u>1740.80</u>	<u>870.90</u>	G-AziSev	<u>720.28</u>	<u>360.65</u>	5
15	<u>1825.89</u>	<u>913.45</u>	1853.88	<u>927.45</u>	I	433.27	217.14	4
16	1926.94	<u>963.97</u>	<u>1954.93</u>	<u>977.97</u>	T	320.18	160.59	3
17	2027.98	<u>1014.50</u>	2055.98	<u>1028.49</u>	T	219.13	110.07	2
18					V	118.09	59.55	1

Fig S31. Identification of azisevoflurane adducts within the  $\gamma_{2L}$ -L3-1D4 subunits of FLAG- $\alpha_1\beta_3\gamma_{2L}$ -L3-1D4 GABA<sub>A</sub> receptors photolabeled in the presence of 30 $\mu$ M azisevoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing azisevoflurane  $\gamma_{2L}$ -G308 adduct within  $\gamma_{2L}$ -L3-1D4 subunit. Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.



#1	Immonium	b <sup>+</sup>	b <sup>2+</sup>	b <sup>3+</sup>	Seq.	y <sup>+</sup>	y <sup>2+</sup>	y <sup>3+</sup>	#2
1	74.06	<b>298.03</b>	149.52	100.01	T-Azils				20
2	86.10	<b>411.11</b>	206.06	137.71	L	2025.03	<b>1013.02</b>	<b>675.68</b>	19
3	60.04	498.14	249.57	166.72	S	1911.95	<b>956.48</b>	637.99	18
4	86.10	611.23	306.12	204.41	I	1824.92	912.96	608.98	17
5	60.04	698.26	349.63	233.42	S	1711.83	856.42	571.28	16
6	44.05	769.30	385.15	257.10	A	1624.80	812.90	542.27	15
7	129.11	925.40	463.20	309.14	R	1553.76	777.39	518.59	14
8	87.06	<b>1040.42</b>	520.72	347.48	N-Deamidated	1397.66	<b>699.33</b>	466.56	13
9	60.04	1127.46	564.23	376.49	S	<b>1282.63</b>	641.82	428.22	12
10	86.10	1240.54	620.77	414.18	L	1195.60	598.31	399.21	11
11	70.07	1337.59	669.30	446.54	P	1082.52	541.76	361.51	10
12	101.11	1465.69	733.35	489.23	K	985.47	493.24	329.16	9
13	72.08	1564.76	782.88	522.26	V	857.37	429.19	286.46	8
14	44.05	1635.79	<b>818.40</b>	545.94	A	758.30	379.65	253.44	7
15	136.08	1798.86	899.93	600.29	Y	687.27	344.14	229.76	6
16	44.05	1869.89	935.45	623.97	A	524.20	262.60	175.41	5
17	74.06	1970.94	<b>985.97</b>	657.65	I	453.17	227.09	151.73	4
18	44.05	2041.98	1021.49	681.33	A	352.12	176.56	118.04	3
19	104.05	2189.01	<b>1095.01</b>	730.34	M-Oxidation	281.08	141.04	94.36	2
20					D	134.04	67.53	45.35	1

Fig S32. Identification of aziisoflurane adducts within the FLAG- $\alpha_1\beta_3\gamma_{2L}$ -L3-1D4 GABA<sub>A</sub> receptors photolabeled in the presence of 30 $\mu$ M aziisoflurane and 3mM isoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing aziisoflurane  $\alpha_1$ -T303 adduct within the FLAG- $\alpha_1$  subunit (corresponding with  $\alpha_1$ -T268). Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.

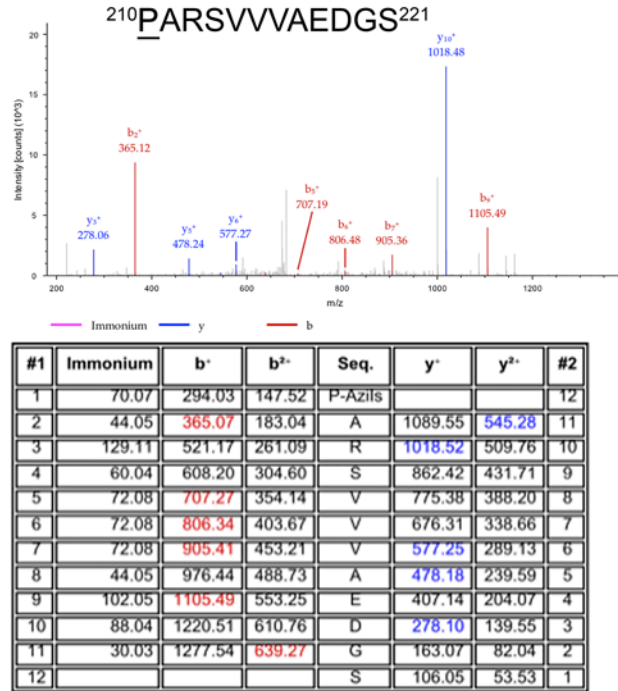
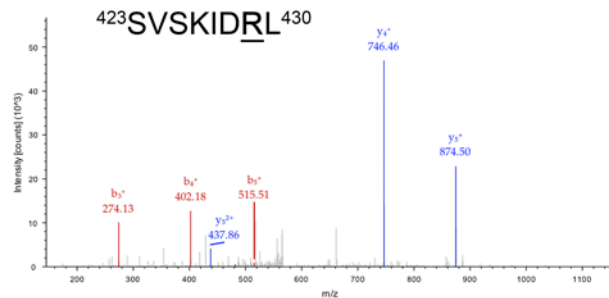


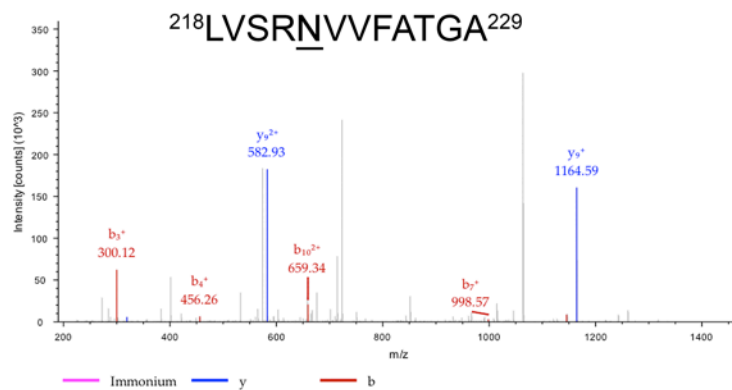
Fig S33. Identification of aziisoflurane adducts within the FLAG- $\alpha_1\beta_3\gamma_{2L}$ -L3-1D4 GABA<sub>A</sub> receptors photolabeled in the presence of 30 $\mu$ M aziisoflurane and 3mM isoflurane. Mass spectrum and corresponding peptide fragment table of peptides containing aziisoflurane  $\alpha_1$ -P210 adducts within the FLAG- $\alpha_1$  subunit (corresponding with  $\alpha_1$ -P170). Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.





#1	Immonium	b <sup>+</sup>	b <sup>2+</sup>	Seq.	y <sup>+</sup>	y <sup>2+</sup>	#2
1	60.04	88.04	44.52	S			8
2	72.08	187.11	94.06	V	1060.51	530.76	7
3	60.04	<b>274.14</b>	137.57	S	961.44	<b>481.22</b>	6
4	101.11	<b>402.23</b>	201.62	K	<b>874.41</b>	<b>437.71</b>	5
5	86.10	<b>515.32</b>	258.16	I	<b>746.31</b>	373.66	4
6	88.04	630.35	315.68	D	633.23	317.12	3
7	129.11	1016.44	508.73	R-AziSev	518.20	259.60	2
8				L	132.10	66.55	1

Fig S34. Identification of azisevoflurane adducts within the FLAG- $\alpha_1\beta_3\gamma_{2L}$ -L3-1D4 GABA<sub>A</sub> receptors photolabeled in the presence of 30 $\mu$ M azisevoflurane and 3mM sevoflurane respectively. Mass spectrum and corresponding peptide fragment table of peptides containing azisevoflurane  $\alpha_1$ -R429 adduct within the FLAG- $\alpha_1$  subunit (corresponding with  $\alpha_1$ -R429 in the  $\alpha_1$  subunit). Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.



#1	Immonium	b <sup>+</sup>	b <sup>2+</sup>	Seq.	y <sup>+</sup>	y <sup>2+</sup>	#2
1	86.10	114.09	57.55	L			12
2	72.08	213.16	107.08	V	1350.61	675.81	11
3	60.04	<b>300.19</b>	150.60	S	1251.54	626.27	10
4	129.11	<b>456.29</b>	228.65	R	<b>1164.51</b>	<b>582.76</b>	9
5	87.06	800.33	400.67	N-AziSev	1008.41	504.71	8
6	72.08	899.40	450.20	V	664.37	332.69	7
7	72.08	<b>998.47</b>	499.74	V	565.30	283.15	6
8	120.08	<b>1145.54</b>	573.27	F	466.23	233.62	5
9	44.05	1216.58	608.79	A	<b>319.16</b>	160.08	4
10	74.06	1317.62	<b>659.32</b>	T	248.12	124.57	3
11	30.03	1374.65	687.83	G	147.08	74.04	2
12				A	90.05	45.53	1

Fig S35. Identification of azisevoflurane adducts within the FLAG- $\alpha_1\beta_3\gamma_{2L}$ -L3-1D4 GABA<sub>A</sub> receptors photolabeled in the presence of 30 $\mu$ M azisevoflurane and 3mM sevoflurane respectively. Mass spectrum and corresponding peptide fragment table of peptides containing azisevoflurane  $\beta_3$ -N222 adduct within the  $\beta_3$  subunit (corresponding with  $\beta_3$ -N197). Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.

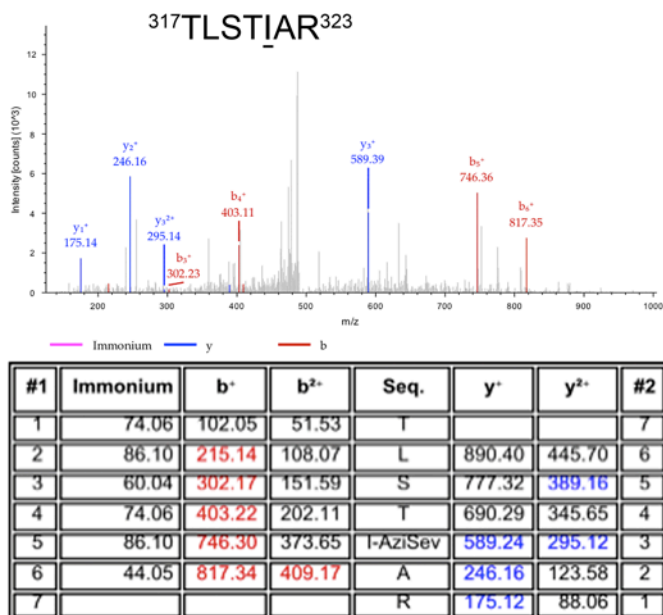


Fig S36. Identification of azisevoflurane adducts within the FLAG- $\alpha_1\beta_3\gamma_{2L}$ -L3-1D4 GABA<sub>A</sub> receptors photolabeled in the presence of 30 $\mu$ M azisevoflurane and 3mM sevoflurane respectively. Mass spectrum and corresponding peptide fragment table of peptides containing azisevoflurane  $\gamma_{2L}$ -I321(D) adduct within the  $\gamma_{2L}$ -L3-1D4 subunit (corresponding with  $\gamma_{2L}$ -I282 in  $\gamma_{2L}$  subunit). Residue modified by photolabel derivative is in bold and underlined. Detected identified ions are colored and labeled accordingly. Residues detected with a modification are noted.