



Table 1. IC₅₀, molecular weight and GRAVY value of DPP-IV inhibitory peptides.

Sequence	IC ₅₀ (μM)	References	Molecular Weight	GRAVY Value
IPI	5	[1]	341.4509	2.467
LPL	5	[1]	341.4509	2.000
KVLP	5.3 *	[1]	455.5981	0.625
LPVPQK	17.4 *	[1]	680.8533	-0.433
VPLGTQ	22.8 *	[1]	613.7119	0.300
VPYPQ	26.1 *	[1]	602.688	-0.760
IPA	28.3	[2]	299.3702	1.567
IPIQY	35.2	[2]	632.7576	0.520
WR	37.8	[2]	360.4161	-2.700
INNQLFPYPY	40.1	[2]	1268.449	-0.520
WK	40.6	[2]	332.4027	-2.400
GPGA	41.9	[2]	300.3163	-0.150
PLLQ	42.0 *	[1]	469.5816	0.625
LKPTPEGDLE	42	[2]	1098.227	-1.110
APA	43.3	[3]	257.2895	0.667
ILAP	43.4	[2]	412.5343	2.125
WL	43.6	[2]	317.388	1.450
LPVPQ	43.8 *	[1]	552.6783	0.260
WP	44	[2]	301.3452	-1.250
IPAVF	44.7	[2]	545.6853	2.340
LKPTPEGDDL	45	[2]	969.1113	-0.844
FPI	45.2	[3]	375.4679	1.900
LPQNIPPL	46	[2]	891.0893	0.038
GPPF	46.4 *	[1]	416.4813	-0.200
VPL	47	[2]	327.424	2.133
IPF	47.3	[3]	375.468	1.900
TH	49	[2]	256.2614	-1.950
GPAE	49.6	[2]	372.3782	-0.925
LLAP	53.7	[2]	412.5343	1.950
FPW	54.9	[3]	448.5218	0.100
LPQ	56.7	[2]	356.4222	-0.433
LKPTPEGDLEIL	57	[2]	1324.549	-0.233
LPQYL	60.8 *	[1]	632.7653	0.240
FLQP	65.3	[2]	503.5987	0.375
IPGDGPPGPPGP	65.4	[2]	1154.288	-0.908
WV	65.7	[2]	303.361	1.650
APF	65.8	[3]	333.3873	1.000
MPLW	67.3 *	[1]	545.7032	0.800
TQMVDEEIMEKFR	68.8	[4]	1655.914	-0.869
NH	69	[2]	269.2603	-3.350
IPM	69.5	[5]	359.49	1.600
QPG	70.9	[6]	300.3147	-1.833
QPF	71.7	[6]	390.4393	-0.767
VL	74	[2]	230.3073	4.000
KPA	74.5	[3]	314.3849	-1.233
PFP	74.5 *	[1]	359.4251	-0.133

PQSVLS	74.5 *	[1]	629.7112	0.217
YVPEPF	74.5 *	[1]	750.8493	-0.167
LPGERGRPGAPGP	76.8	[2]	1260.419	-1.146
CAYQWQRPVDRIR	78	[2]	1690.95	-1.138
SPQ	78.9	[6]	330.3409	-1.967
QPQ	79.8	[6]	371.3935	-2.867
GPVGPAGNPGANGLN	81.3	[2]	1291.397	-0.380
GPVGXAGPPGK	83.3	[2]	933.0833	-0.536
TW	84	[2]	305.3336	-0.800
NLGIILR	86.3	[4]	797.9966	1.171
LPVP	87 *	[1]	424.5463	1.200
IA	88	[2]	202.2535	3.150
GPKGDRGLPGPPGRDGM	89.6	[2]	1663.889	-1.353
ML	91	[2]	262.3733	2.850
WA	92.6	[2]	275.3073	0.450
MM	93	[2]	280.4124	1.900
MPVQA	93.3	[7]	544.6727	0.560
GPVGPSPGXGK	93.7	[2]	949.0833	-0.773
FA	94	[2]	236.2706	2.300
PACGGFWISGRPG	96.4	[2]	1304.495	0.046
EMPFK	97.6 *	[1]	747.9135	-0.983
LPLP	101.0 *	[1]	438.5675	1.100
SPGSSGPQGFTG	101.6	[2]	1078.104	-0.717
LQAFEPLR	103.5	[8]	973.1402	-0.113
LPIIDI	105.4	[9]	682.8584	2.033
IAVPTGVA	106	[10]	726.8783	1.725
GPFPIIV	108.0 *	[1]	741.9373	1.771
HPIK	108.0 *	[1]	493.6068	-1.050
LPYPY	108.3	[2]	651.7683	-0.400
VPITPTL	110	[2]	739.9104	1.129
PGVGGPLGPIGPCYE	116.1	[2]	1412.63	0.120
APR	119.7	[3]	342.3982	-1.433
APFPE	120 *	[1]	559.6195	-0.420
APFPEVF	120 *	[1]	805.9287	0.700
WPW	120.1	[3]	487.5585	-1.133
WQ	120.3	[2]	332.3592	-2.200
YVPEPF	124.7	[7]	750.8493	-0.167
VPITPT	130	[2]	626.7509	0.683
WPI	133	[3]	414.5046	0.667
WI	138.7	[2]	317.388	1.800
LAPSTM	140.8	[11]	618.7563	0.733
WLAHKALCSEKLDQ	141	[2]	1641.912	-0.407
IPAVFK	143	[2]	673.8603	1.300
HL	143.2	[2]	268.3159	0.300
PPGPTGPRGQPGNIGF	146.7	[2]	1548.722	-0.931
WN	148.5	[2]	318.3324	-2.200
MAGVDHI	153.4	[2]	741.8665	0.757
KL	159.8	[12]	259.3489	-0.050
WPF	159.8	[3]	448.5218	0.100
LPQNIPP	160	[2]	777.9283	-0.500

GPFILV	163.7	[2]	741.9373	1.671
LAHKALCSEKL	165	[2]	1212.488	0.200
TKCEVFRE	166	[2]	1011.167	-0.825
VA	168.2	[2]	188.2266	3.000
FAGDDAPR	168.7	[11]	847.8829	-0.888
VAGTWY	174	[2]	695.7729	0.450
YPG	174	[13]	335.3599	-1.100
IPW	175.3	[3]	414.5047	0.667
LLQLEAIR	177.8	[7]	955.1753	0.775
LCSEKLDQ	186	[2]	935.0733	-0.638
IPAVFKIDA	191	[2]	973.1893	1.178
LKALPMH	193	[2]	809.0493	0.371
YPYY	194.4	[2]	604.6598	-1.375
LPQNIPPLT	205.2	[5]	992.1953	-0.044
WSG	209.9	[14]	348.3587	-0.700
SPVVPF	214.1	[7]	644.7686	1.200
WWW	216	[2]	576.6551	-0.900
VPGEIVE	224.5	[5]	741.8396	0.557
GPMGPXGVK	226.9	[2]	839.0323	-0.422
LTFPGSAED	228	[10]	935.9862	-0.233
APGPAGP	229.1	[9]	565.6269	-0.286
WIQP	237.3	[2]	542.6355	-0.375
WM	243.1	[2]	335.4271	0.500
YPY	243.7	[2]	441.4838	-1.400
GPAV	245.6	[15]	342.3953	1.000
FPF	247	[3]	409.4851	1.333
FPGIPN	260	[2]	740.8573	-0.200
ILDKVGINY	263	[2]	1034.231	0.489
FSD	275.1	[14]	367.3585	-0.500
WY	281	[2]	367.4045	-1.100
WLAHKAL	286	[2]	838.0205	0.457
GPAGPpGVpGL #	318.1	[2]	918.0693	0.164
TPEVDDEALEK	319.5	[2]	1245.306	-1.264
LPLPL	325	[2]	551.7271	1.640
IQKVAGTW	329	[2]	902.0615	0.138
IVQNNDSTEYGLF	337	[2]	1499.597	-0.415
FL	339.6	[2]	278.3513	3.300
ILDKEGIDY	347.8	[7]	1065.197	-0.367
WRE	350	[2]	489.5316	-2.967
MHQPPQPL	350.4	[2]	947.1262	-1.163
YPL	364.6	[13]	391.4673	0.300
LPLPLL	371.5	[5]	664.8865	2.000
WRD	376	[2]	475.5047	-2.967
VP	380.3	[5]	214.2645	1.300
PPL	390.1	[2]	325.4081	0.200
FAGDDAPRA	393.3	[11]	918.9617	-0.589
WRN	403	[2]	474.52	-2.967
WRK	406	[2]	488.5903	-3.100
IPSK	406.8	[5]	443.5483	-0.450
IP	410	[2]	228.2914	1.450

WRF	413	[2]	507.5927	-0.867
WC	420	[2]	307.3733	0.800
VLVLDTDYK	424.4	[2]	1065.232	0.344
IPPL	428.9	[5]	438.5733	1.275
HPINHR	452.2	[2]	772.8652	-1.917
LA	454	[2]	202.2535	2.800
IPPLTQT	465.1	[5]	768.9173	0.029
WRG	473	[2]	417.4681	-1.933
WT	482.1	[2]	305.3336	-0.800
WRS	483	[2]	447.4943	-2.067
LKGYGGVSLPE	486	[2]	1119.293	-0.045
WRW	487	[2]	546.6294	-2.100
WRT	526	[2]	461.5212	-2.033
FF	546.8	[15]	312.3684	2.800
WW	554.8	[2]	390.4418	-0.900
LPP	563.3	[5]	325.4081	0.200
WRR	570	[2]	516.6037	-3.300
VLGP	580.4	[2]	384.476	1.500
WRY	640	[2]	523.5921	-2.233
WS	643.5	[2]	291.3067	-0.850
RP	657.2	[5]	271.3195	-3.050
YP	658.1	[2]	278.3078	-1.450
WRH	670	[2]	497.5573	-2.867
YFPFGPIP	670	[2]	1001.15	-0.478
WRM	673	[2]	491.6147	-1.167
SPTVMFPPQSVL	676.3	[2]	1302.558	0.525
WRA	690	[2]	431.4949	-1.200
WRQ	720	[2]	488.5469	-2.967
ILELA	721.1	[7]	557.6933	2.080
WRI	730	[2]	473.5756	-0.300
YFPFGP	749.2	[5]	676.7699	-0.617
WRP	780	[2]	457.5328	-2.333
VR	826.1	[2]	273.3354	-0.150
MP	870	[2]	246.3304	0.150
AL	882.1	[2]	202.2534	2.800
HP	902.8	[5]	252.2731	-2.400
WRL	903	[2]	473.5756	-0.533
RRDY	930	[16]	608.655	-3.450
LW	993.4	[2]	317.388	1.450
PGPIHNS	1000	[2]	720.7833	-0.943
QPLPPT	1013.8	[5]	651.7606	-0.867
KVEPLP	1071.9	[17]	681.8304	-0.433
LQP	1181.1	[2]	356.4222	-0.433
RL	1200	[16]	287.3623	-0.350
IPPLTQTPV	1300	[2]	965.1693	0.311
TPVVVPP	1408.9	[5]	707.8682	1.014
PQNIPPL	1500	[2]	777.919	-0.500
DPF	1540	[16]	377.3971	-0.767
GF	1547.1	[18]	222.2438	1.200
GPGSPGGPL	1638.3	[2]	737.8173	-0.378

MW	1691.4	[2]	335.4271	0.500
QPHQPLPPT	1754.8	[5]	1014.149	-1.500
LR	2083.6	[12]	287.3623	-0.350
MGSF	2120	[16]	440.5206	0.875
LP	2370	[2]	228.2914	1.100
TP	2370	[2]	216.2369	-1.150
VPPFIQPE	2500	[2]	926.0803	-0.038
SL	2517.1	[2]	218.2529	1.500
KP	2540	[2]	243.3061	-2.750
GL	2615	[2]	188.2267	1.700
GPA	2870	[16]	243.2627	-0.067
PAL	2943.1	[17]	299.3702	1.333
EK	3216.7	[2]	275.3049	-3.700
FP	3630	[2]	262.3085	0.600
IHF	3770	[16]	415.4925	1.367
KRIHF	4110	[16]	699.8543	-0.860
PP	4343.5	[18]	212.2486	-1.600
VC	5413.4	[15]	220.2926	3.350
SP	5980	[2]	202.2101	-1.200
KA	6270	[2]	217.2682	-1.050
AAATP	6470	[2]	429.4733	0.620
AP	7950	[2]	186.2106	0.100
AAAAG	8130	[2]	359.3824	1.360
GGPAGPAV	8139.1	[18]	624.6948	0.425
AA	9400	[2]	160.1728	1.800
GP	9690	[2]	172.1839	-1.000

* Estimated based on their reported percent relative potency.

p, hydroxyproline

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