Figure 2

Fig. 2a (anti-MGO)

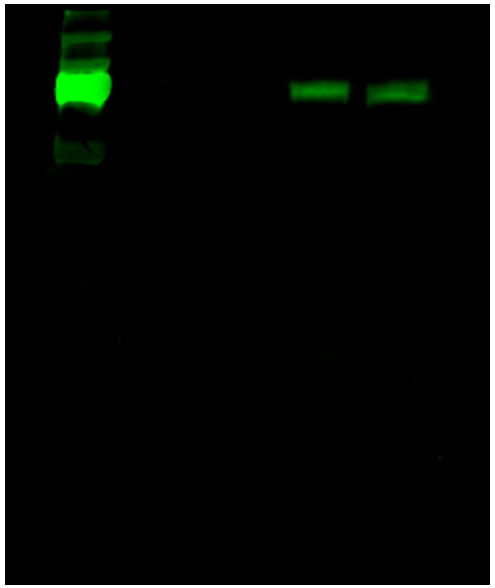


Fig. 2a (anti-H3 Cit)

Fig. 2a (EtBr)

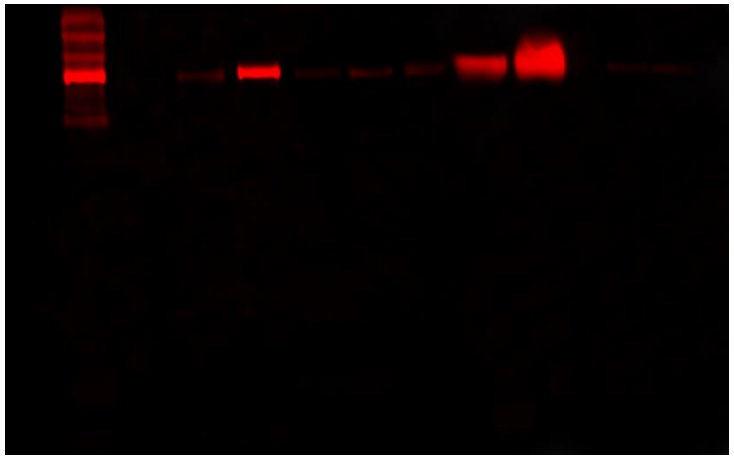


Fig. 2b (anti-MGO)

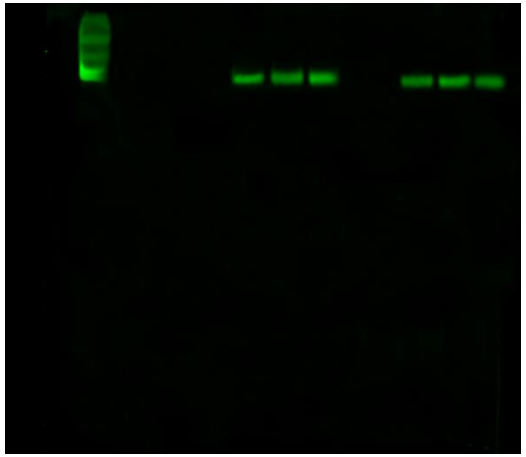


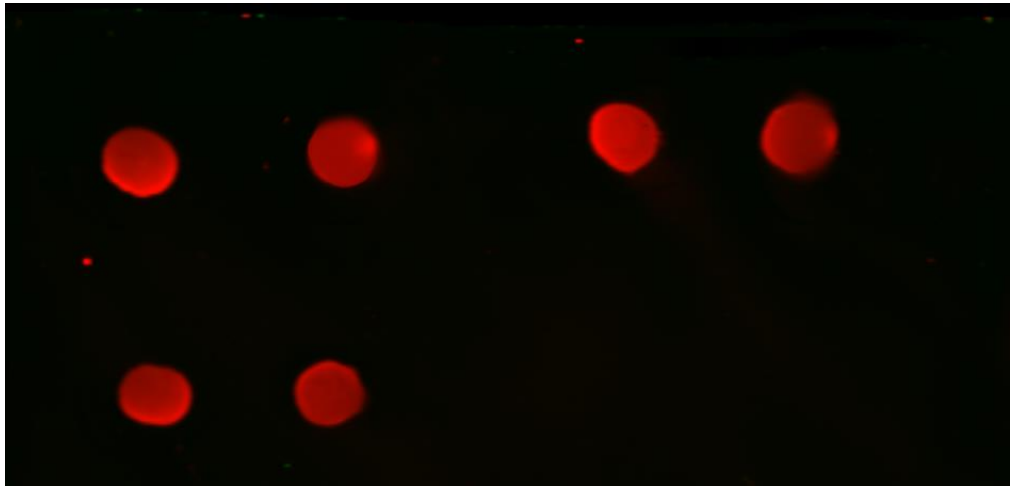
Fig. 2b (anti-H3 Cit)

Fig. 2b (EtBr)

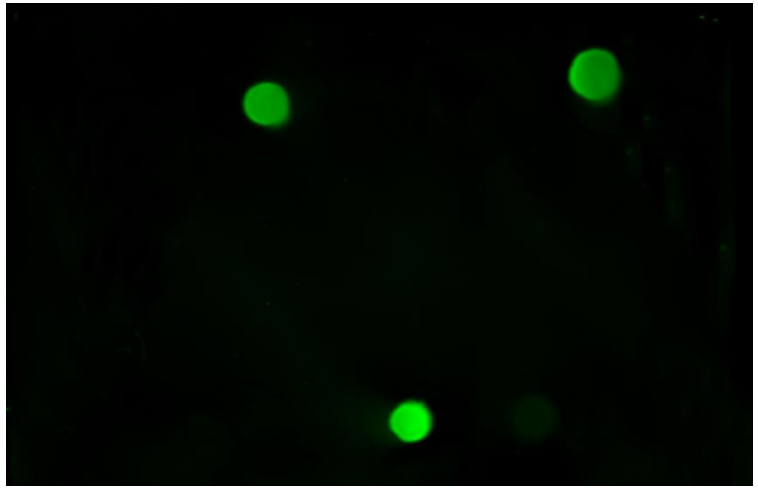
Figure 2

	MGO -, PAD4 -			MGO +, PAD4 -			MGO -, PAD4 +			MGO +, PAD4 + (C)			MGO + (S), PAD4 +			MGO + (L), PAD4 +		
0.0	100.0	100.0	100.0	100.0	100.0	100.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0.5	83.0	82.0	78.0	98.0	96.0	100.	83.0	87.0	90.0	88.0	92.0	94.0	92.0	95.0	95.0	93.0	96.0	98.0
1.0	75.9	70.0	64.0	95.0	93.0	86.	78.0	75.0	71.0	81.0	78.0	75.0	84.0	82.0	78.0	84.0	85.0	86.0
1.5	62.0	50.0	64.0	89.5	82.0	90.	70.0	65.0	63.0	73.0	68.0	66.0	77.0	74.0	70.0	80.0	75.0	76.0
2.0	47.0	44.5	30.3	68.0	75.0	79.	46.0	55.0	54.0	49.0	60.0	59.0	53.0	62.0	64.0	56.0	68.0	65.0
2.5	10.1	14.0	5.6	58.0	40.0	53.	28.0	20.0	22.0	30.0	23.0	25.0	34.0	25.0	28.0	37.0	28.0	32.0

Fig. 2c



Atto 680-Streptavidin



anti-MGO

Fig. 2d

Figure 3

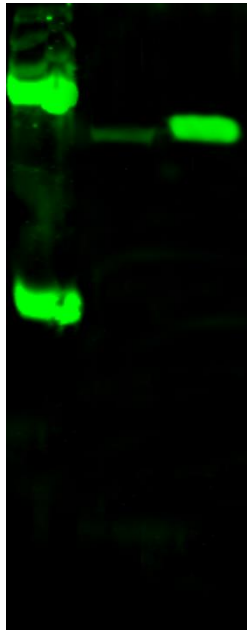


Fig. 3a (anti-PAD4)

Fig. 3a (anti-actin)

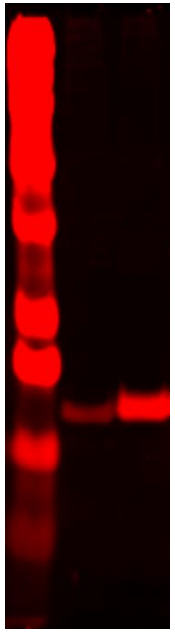


Fig. 3a (anti-H3Cit)

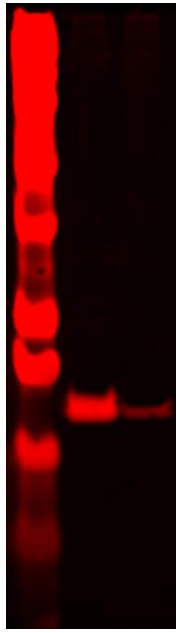


Fig. 3a (anti-H3R8me2)

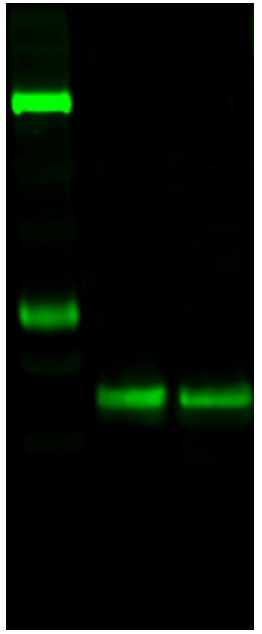


Fig. 3a (anti-H3)

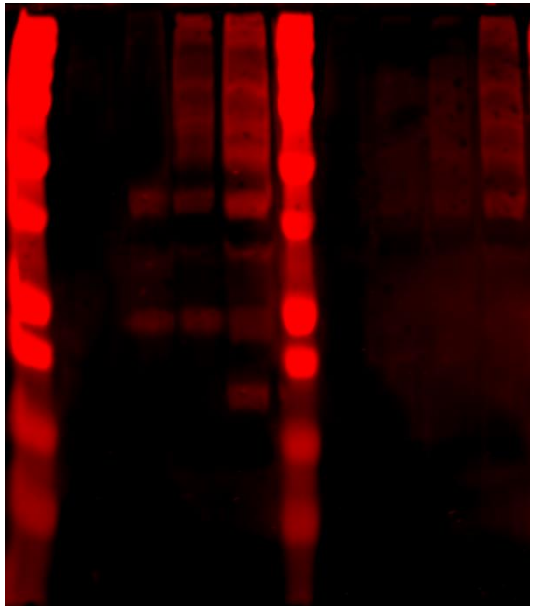


Fig. 3a (anti-MGO)

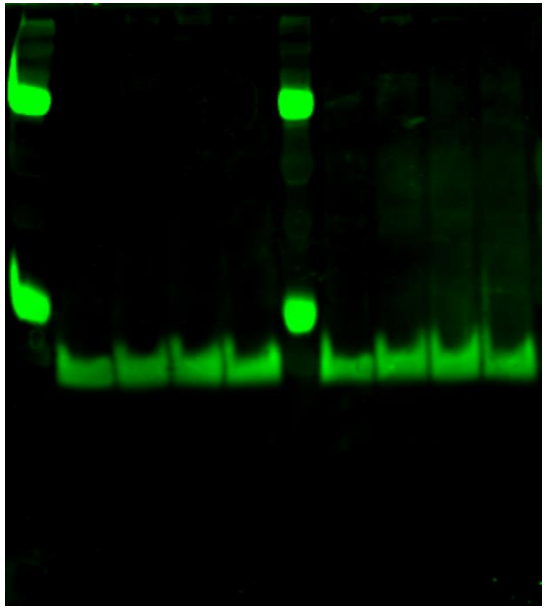


Fig. 3a (anti-H3)

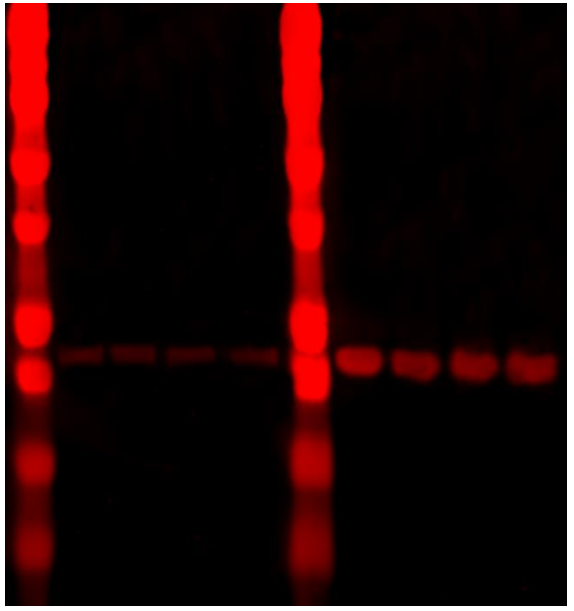


Fig. 3a (anti-H3Cit)

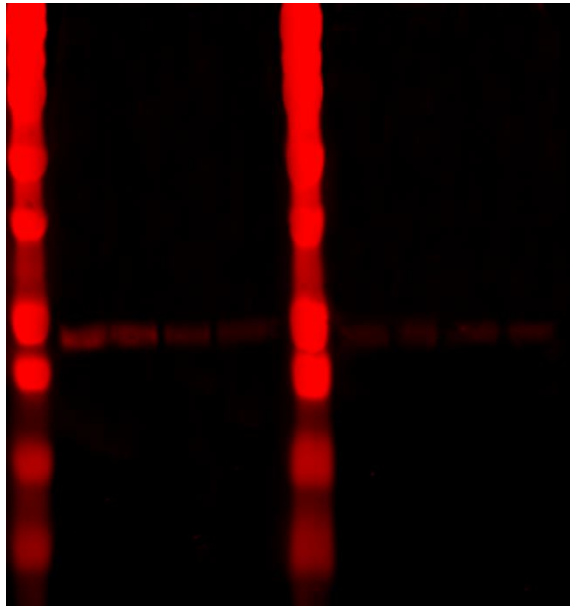


Fig. 3a (anti-H3R8me2)

Figure 3

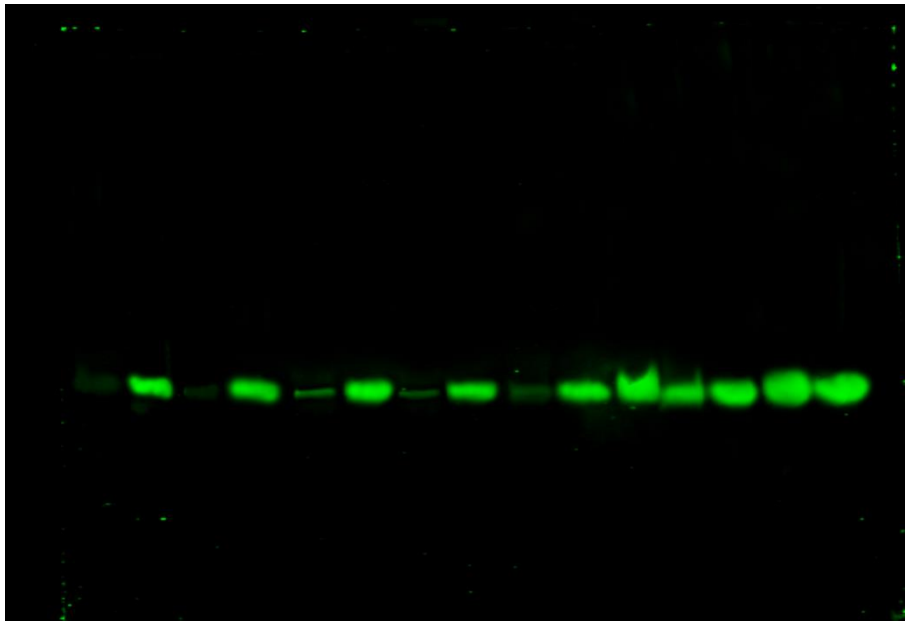


Fig. 3b (anti-H3)

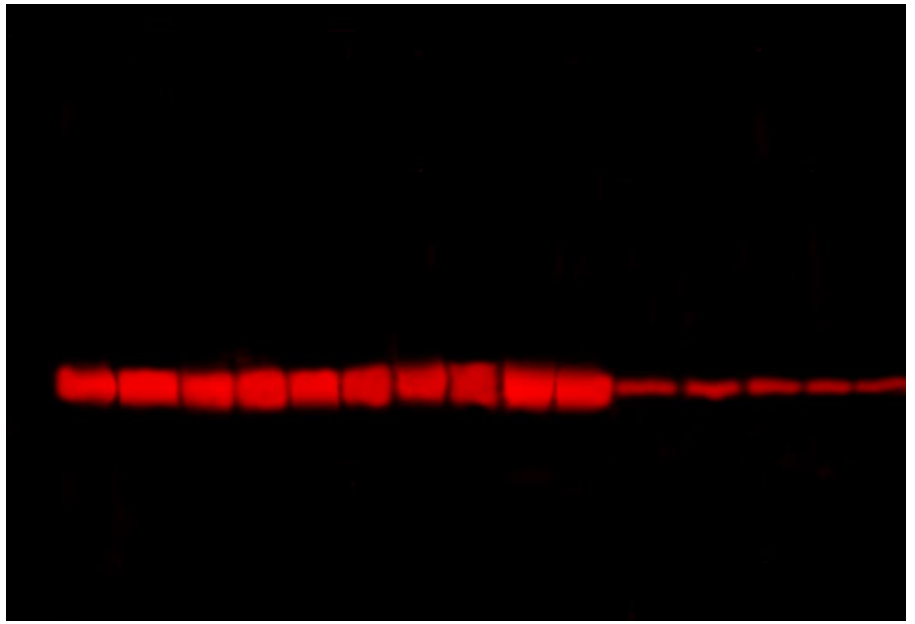


Fig. 3b (anti-H3Cit)

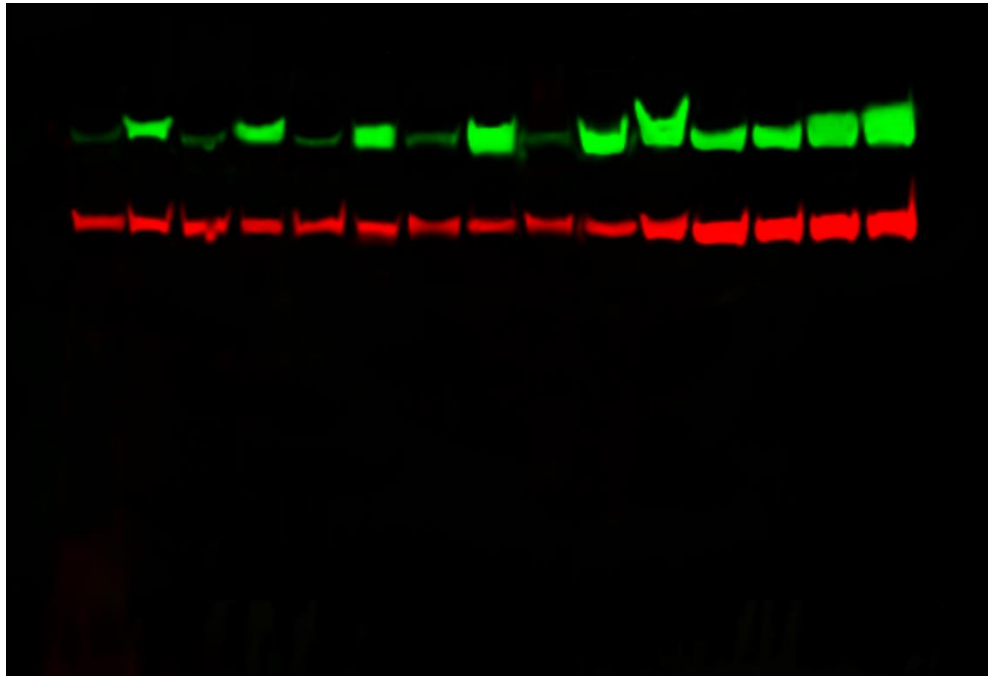
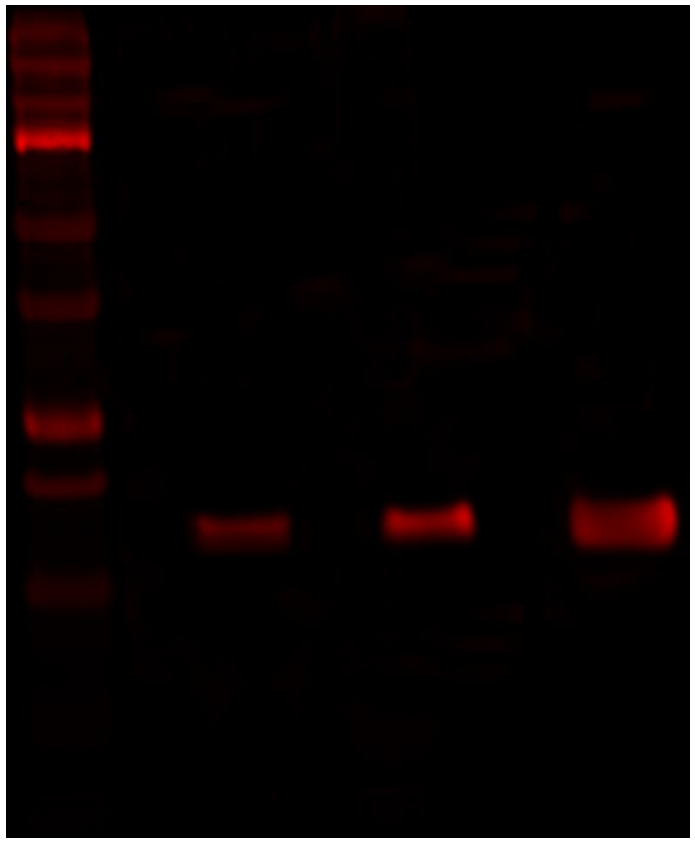
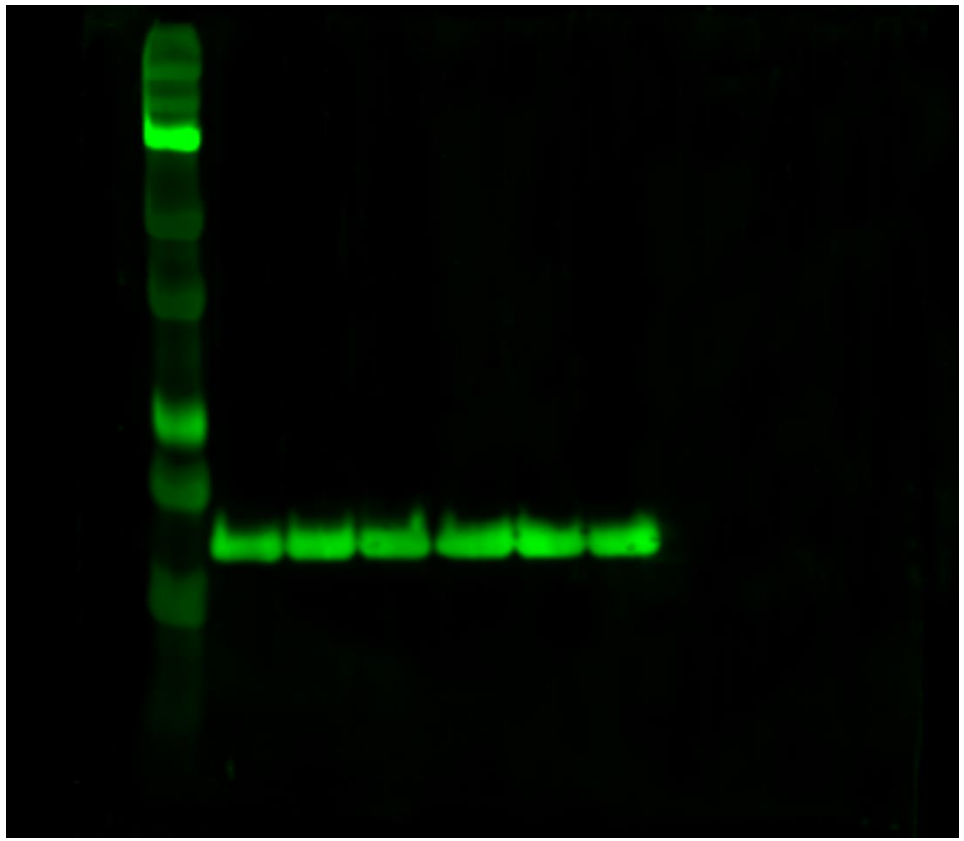


Fig. 3b (anti-PAD4 & anti-actin)

Supplementary Figure 2

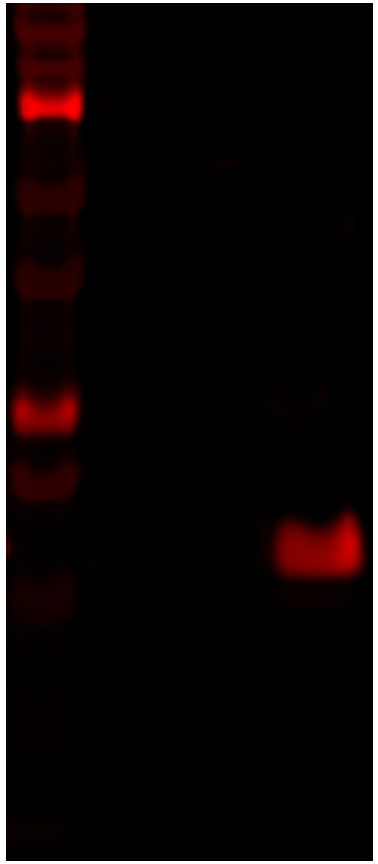


anti-H3Cit

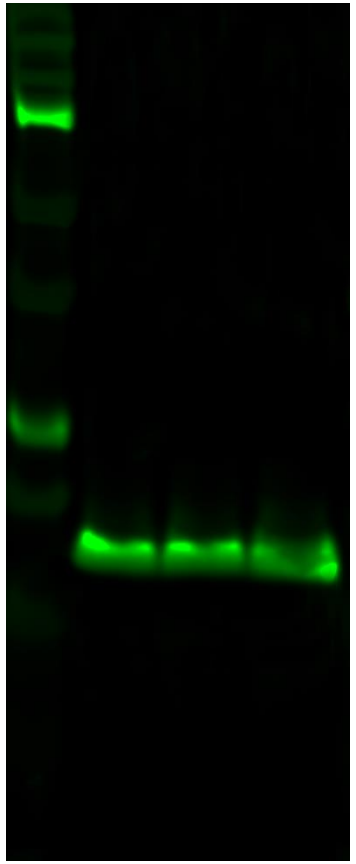


anti-H3

Supplementary Figure 3

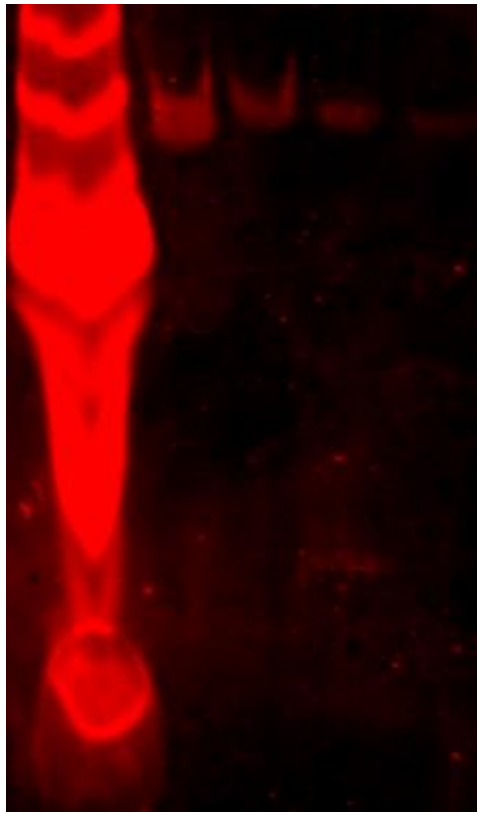


anti-H3Cit

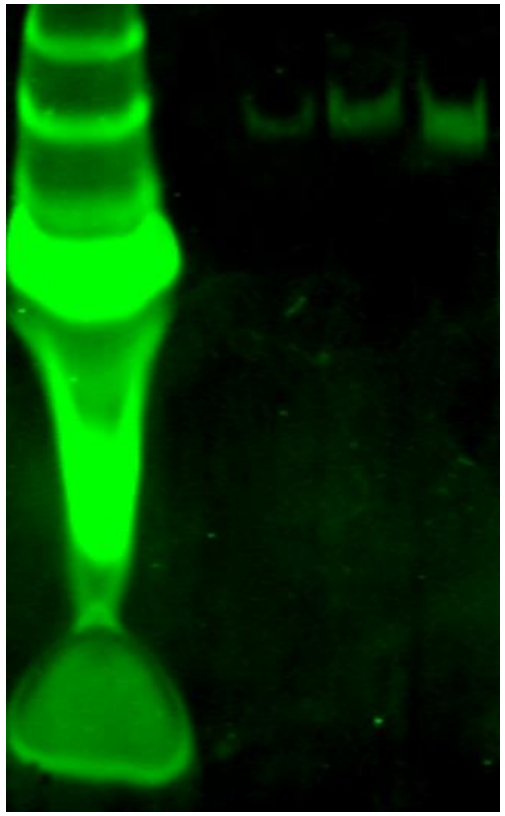


anti-H3

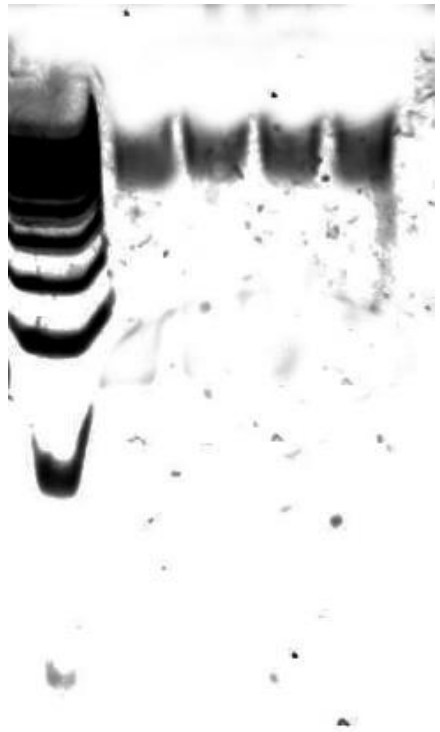
Supplementary Figure 4



anti-MGO

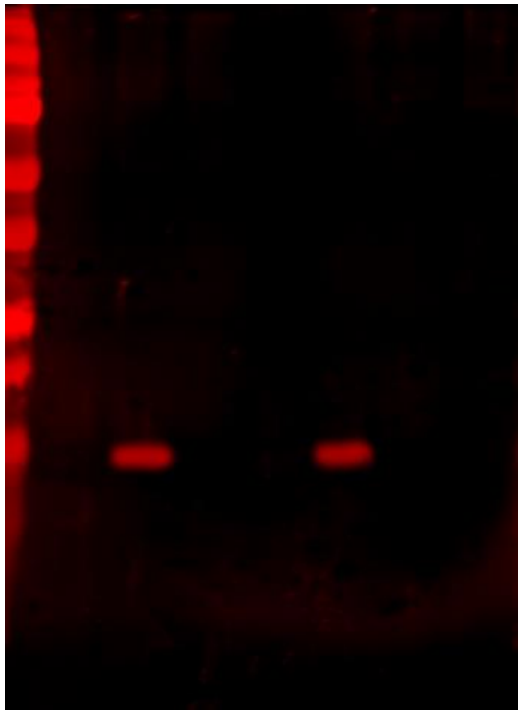


anti-H3Cit

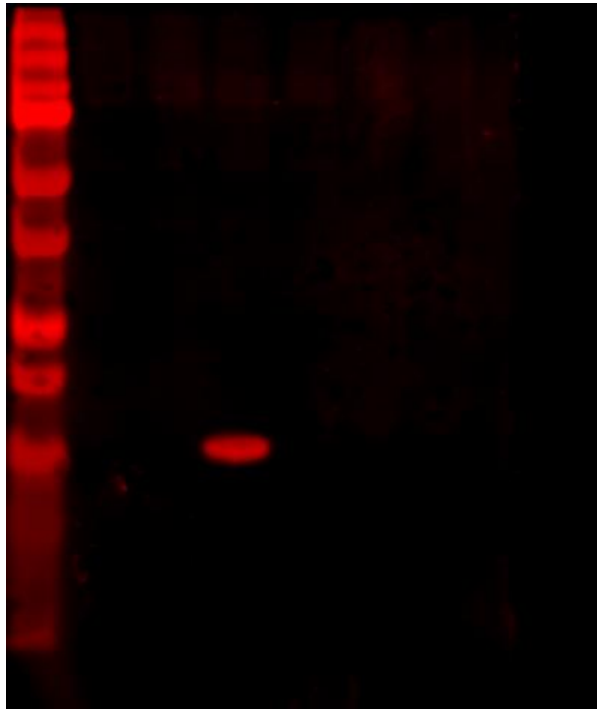


EtBr

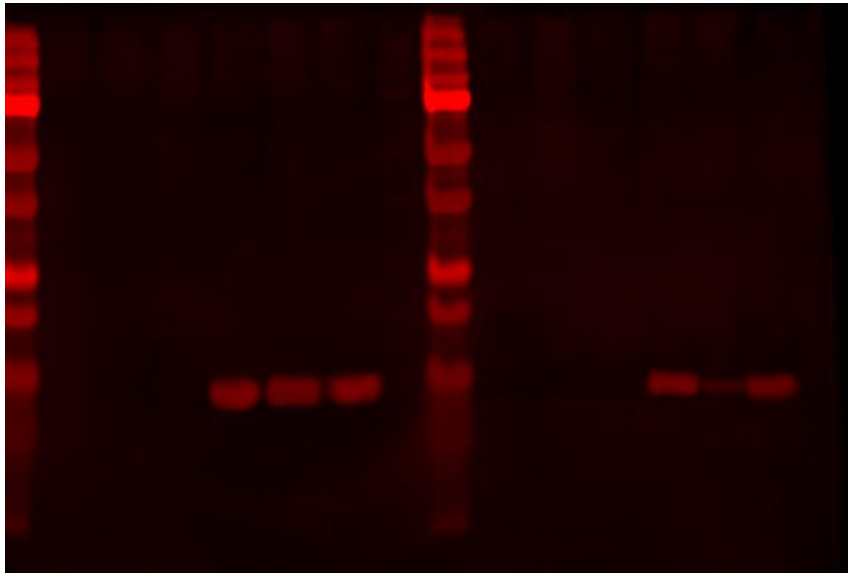
Supplementary Figure 7



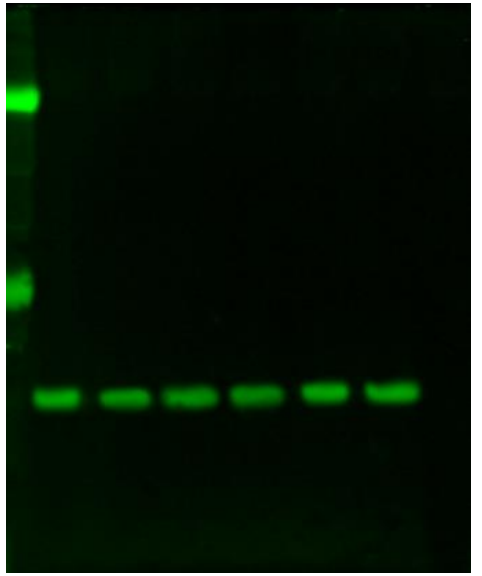
anti-H4Cit3



anti-H4R3me2



anti-MGO



anti-H4

Supplementary Figure 8

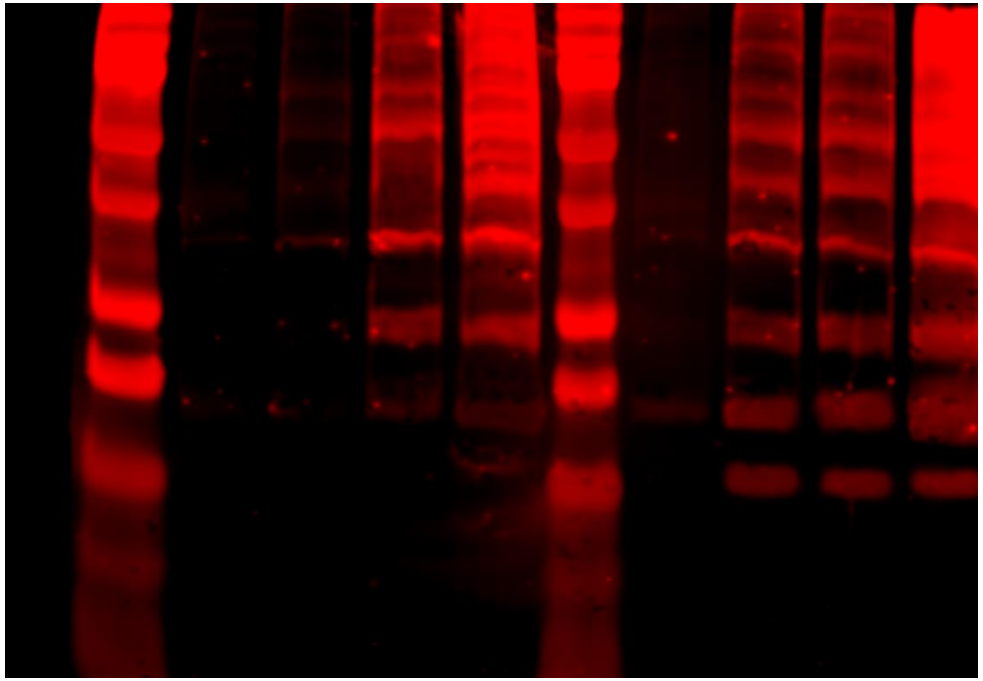
	MGO -, DJ-1 -			MGO +, DJ-1 -			MGO -, DJ-1 +			MGO +, DJ-1 + (Co)			MGO + (S), DJ-1 +			MGO + (L), DJ-1 +		
0.0	100.0	100.0	100.0	100.0	100.0	100.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0.5	83.0	82.0	78.0	98.0	96.0	100.	80.0	79.0	74.0	84.0	83.0	80.0	88.0	90.0	84.0	96.0	97.0	96.0
1.0	75.9	70.0	64.0	95.0	93.0	86.	73.0	68.0	60.0	76.0	72.0	65.0	82.0	74.0	68.0	90.0	88.0	89.0
1.5	62.0	50.0	64.0	89.5	82.0	90.	59.0	48.0	62.0	63.0	51.0	65.0	68.0	55.0	66.0	86.0	82.0	84.0
2.0	47.0	44.5	30.3	68.0	75.0	79.	45.0	41.0	29.0	48.0	46.0	32.0	50.0	53.0	39.0	62.0	68.0	70.0
2.5	10.1	14.0	5.6	58.0	40.0	53.	9.0	10.0	5.3	11.0	15.0	7.0	14.0	12.0	16.0	47.0	36.0	49.0

Fig. S8a

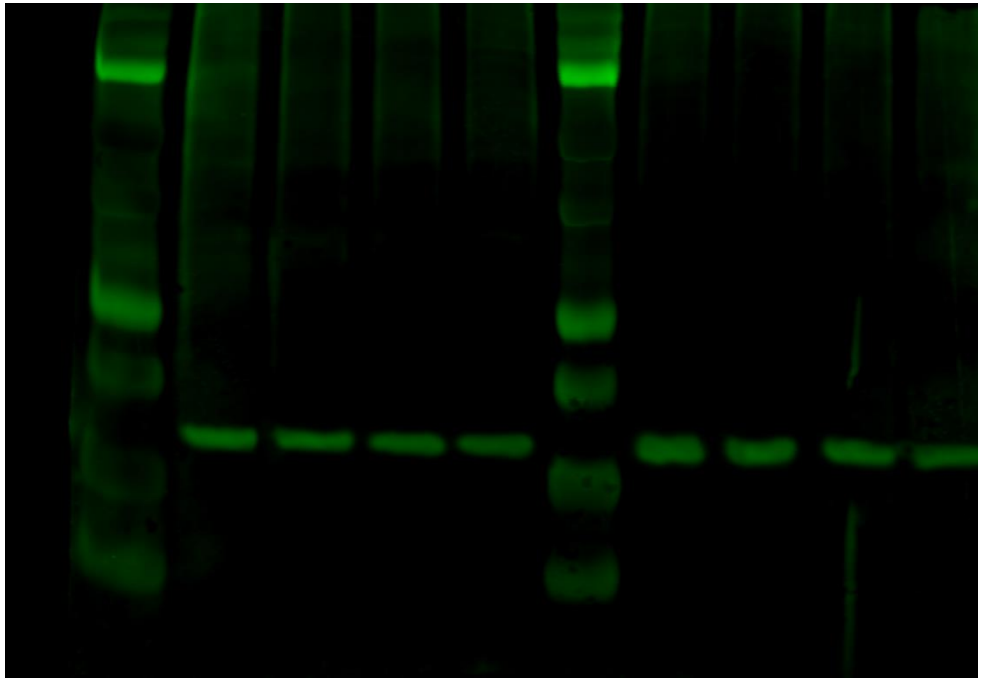
	MGO -, enzyme -			MGO +, enzyme -			MGO +, PAD4 +, DJ1 +			MGO +, mutant enzyme +		
0.0	100.0	100.0	100.0	100.0	100.0	100.	100.0	100.0	100.0	100.0	100.0	100.0
0.5	83.0	82.0	78.0	98.0	96.0	100.	83.0	87.0	90.0	99.0	100.0	98.0
1.0	75.9	70.0	64.0	95.0	93.0	86.	78.0	75.0	71.0	92.0	93.0	89.0
1.5	62.0	50.0	64.0	89.5	82.0	90.	70.0	65.0	63.0	82.0	87.0	88.0
2.0	47.0	44.5	30.3	68.0	75.0	79.	46.0	55.0	54.0	64.0	70.0	82.0
2.5	10.1	14.0	5.6	58.0	40.0	53.	28.0	20.0	22.0	55.0	48.0	56.0

Fig. S8b

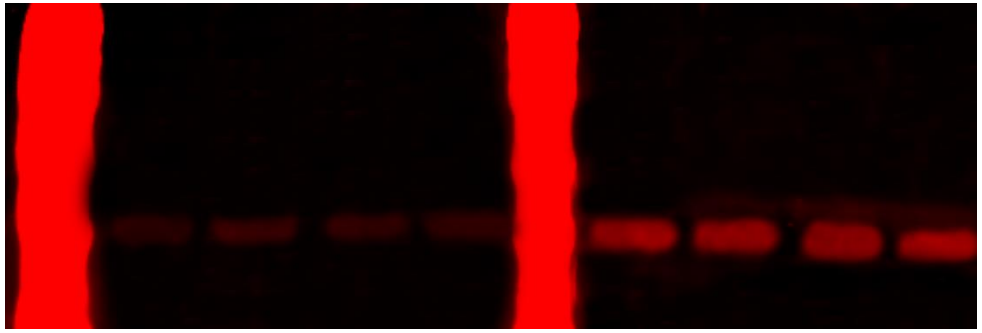
Supplementary Figure 10



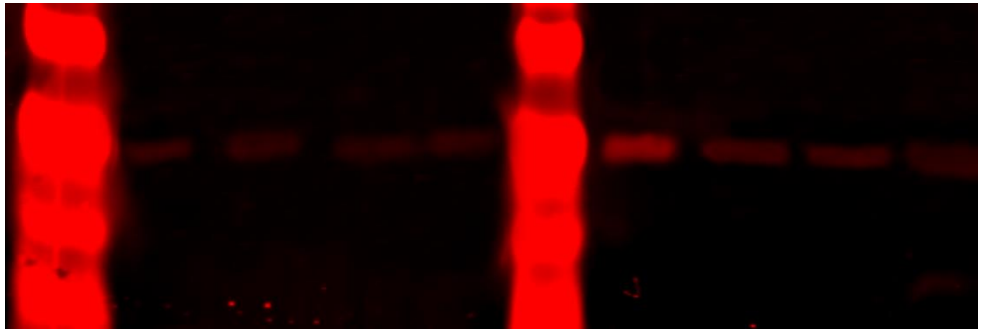
anti-MGO



anti-H3

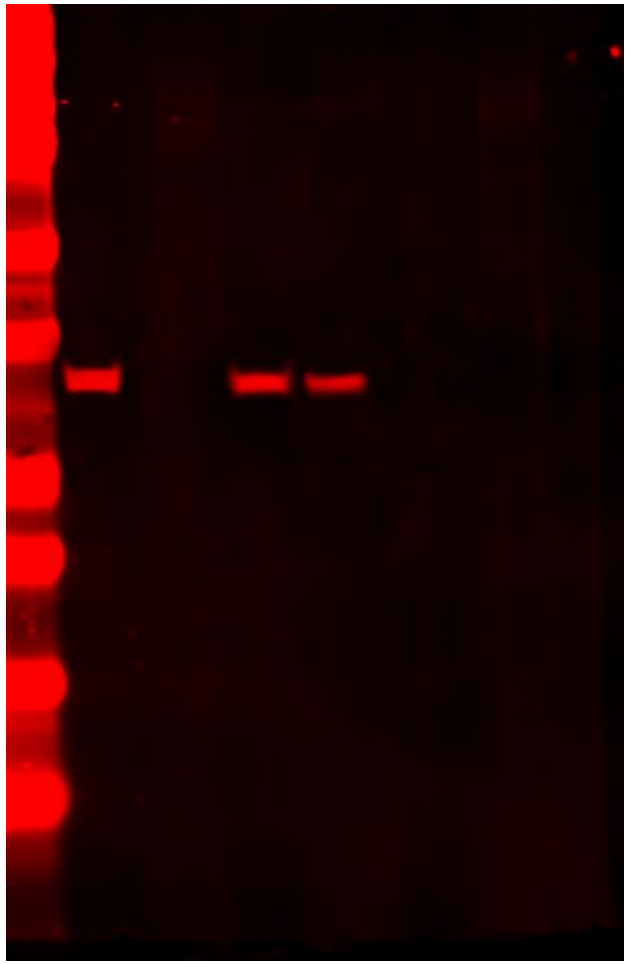


anti-H3Cit

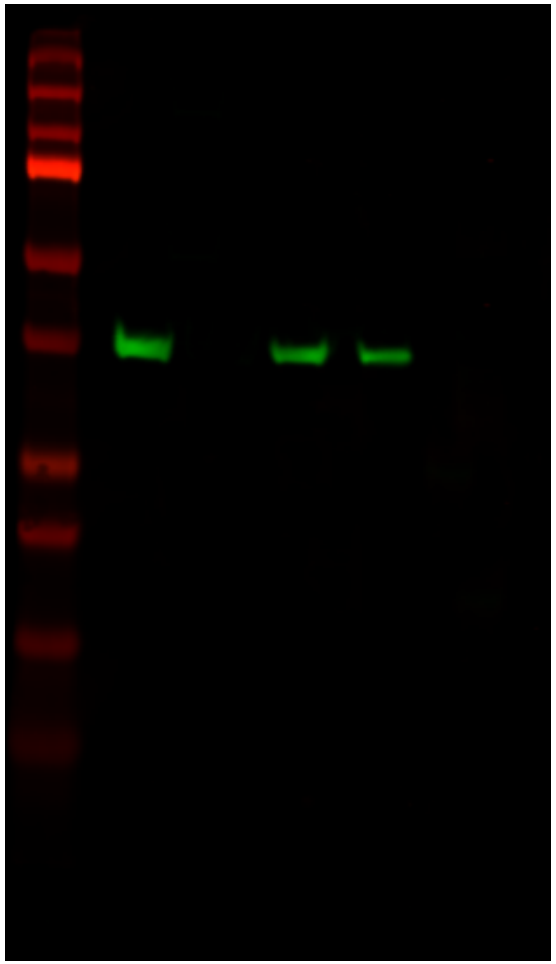


anti-H3R8me2

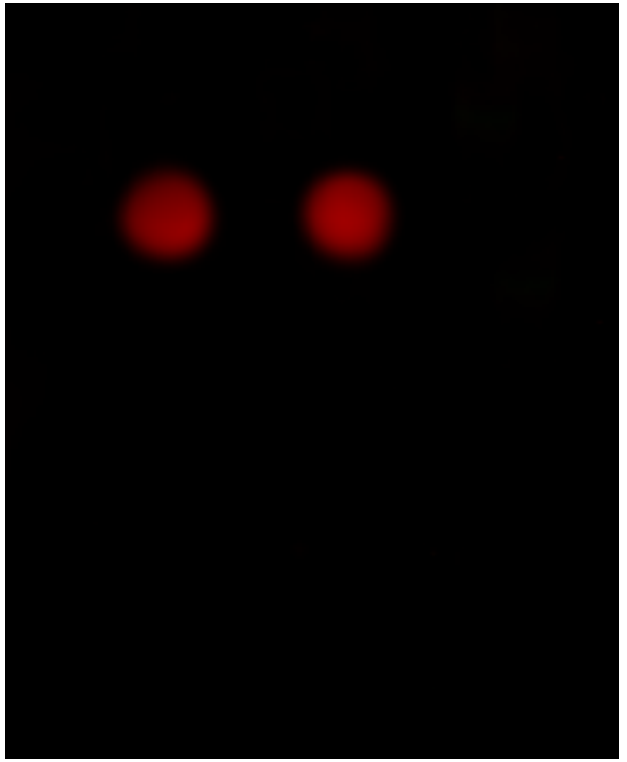
Supplementary Figure 12



anti-PAD4



anti-HA



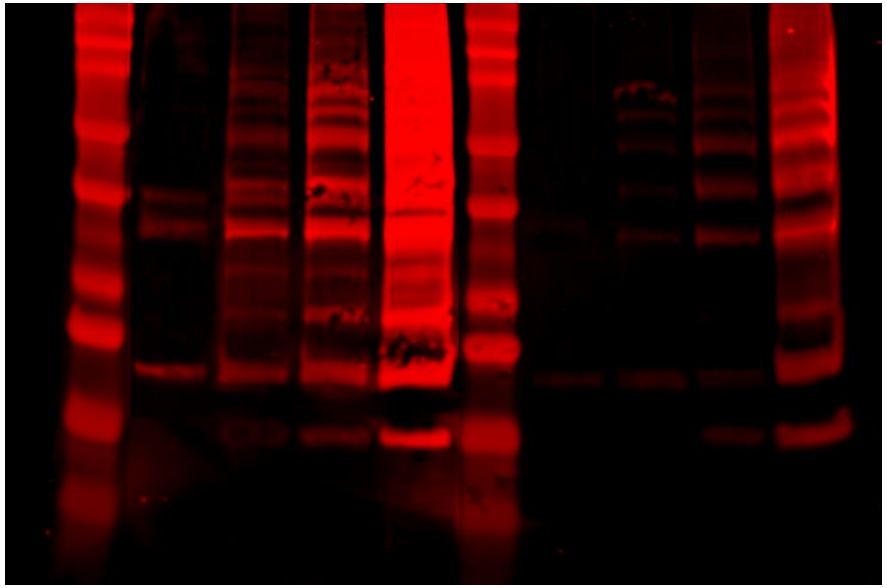
anti-MGO

Supplementary Figure 13

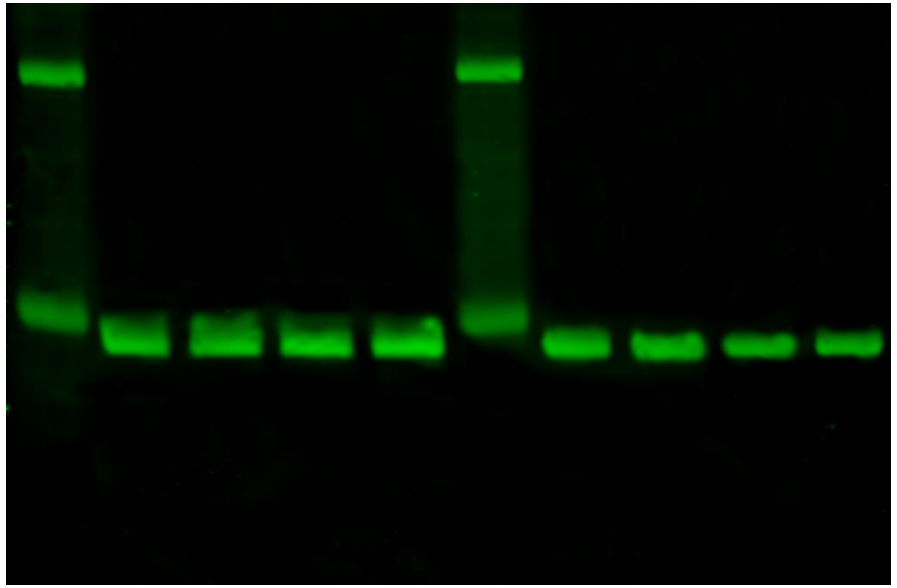
WT	PAD4 (+)	PAD4-C645S (+)
100.	160.	103.
100.	180.	110.
100.	148.	119.

	WT 293T Cells			PAD4 (+)			PAD4-C645S (+)		
0.0	100.	100.	100.	100.	100.	100.	100.	100.	100.
0.1	106.	104.	110.	111.	118.	124.	106.	107.	109.
0.2	94.	99.	90.	100.	110.	101.	98.	99.	96.
0.4	90.	80.	86.	102.	96.	99.	92.	86.	88.
0.8	82.	75.	86.	96.	88.	94.	87.	81.	86.
1.6	58.	60.	68.	82.	73.	80.	64.	65.	69.
3.2	25.	30.	35.	55.	65.	60.	24.	36.	45.

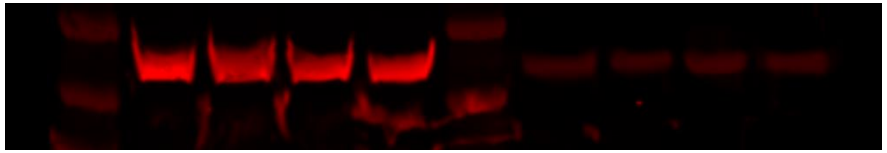
Supplementary Figure 14



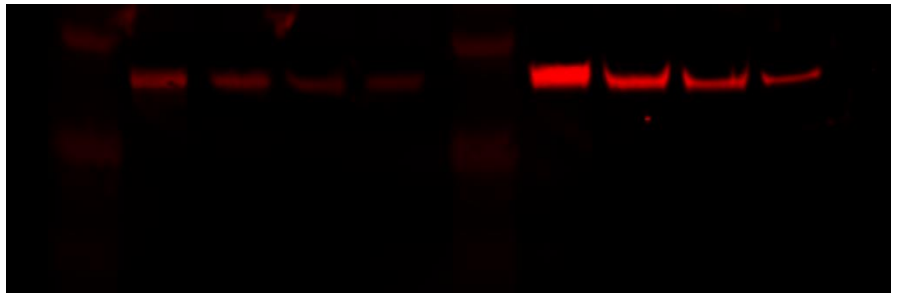
anti-MGO



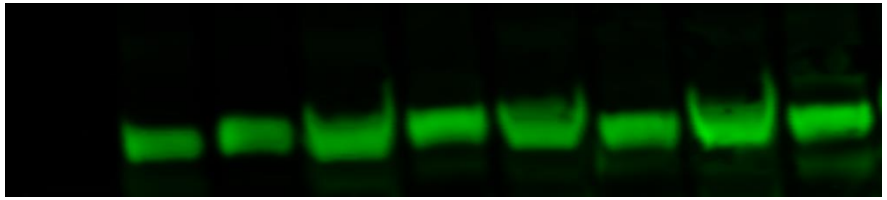
anti-H3



anti-H3Cit



anti-H3R8me2



anti-PAD4

Supplementary Figure 15

0.00	0.10	0.30	0.11	0.15	0.180	0.80	1.	0.00	0.08	0.09
0.02	0.12	0.56	0.14	0.17	0.170	0.65	1.	0.01	0.10	0.11
0.01	0.14	0.40	0.15	0.16	0.190	0.70	1.	0.02	0.12	0.14

Fig. S15a

0.	0.10	0.20	1.0	1.0	1.00	10.	15.0	17.0	38.	40.	50.
0.	0.01	0.05	0.2	0.3	0.12	3.	4.0	4.8	19.	21.	26.

Fig. S15b

0.3	0.50	0.250	1.0	1.0	1.00	1.6	2.5	2.9	5.0	6.0	8.0
0.0	0.20	0.125	0.3	0.5	0.48	0.5	0.8	1.0	1.8	2.0	3.0

Fig. S15c