Electronic Supplementary Material (ESI) for Food & Function. This journal is © The Royal Society of Chemistry 2023

### Western blotting images

#### Figure 3A

From left to right:

Control group, DNP group, DNP+FNT20µM group, and DNP+FNT40µM group.

p38 (triplicate)	p-p38 (triplicate)
ERK1/2 (triplicate)	p-ERK1/2 (triplicate)
	====
JNK (triplicate)	p-JNK (triplicate)

	====
====	
GAPDH (triplicate)	

# Figure 3B

From left to right:

Control group, DNP group, DNP+FNT20µM group, and DNP+FNT40µM group.

P65 (triplicate)	p-p65 (triplicate)
------------------	--------------------

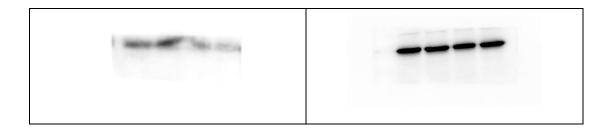
IKBα(triplicate)	p- IKBα(triplicate)
GAPDH	GAPDH

# Figure 4D

From left to right:

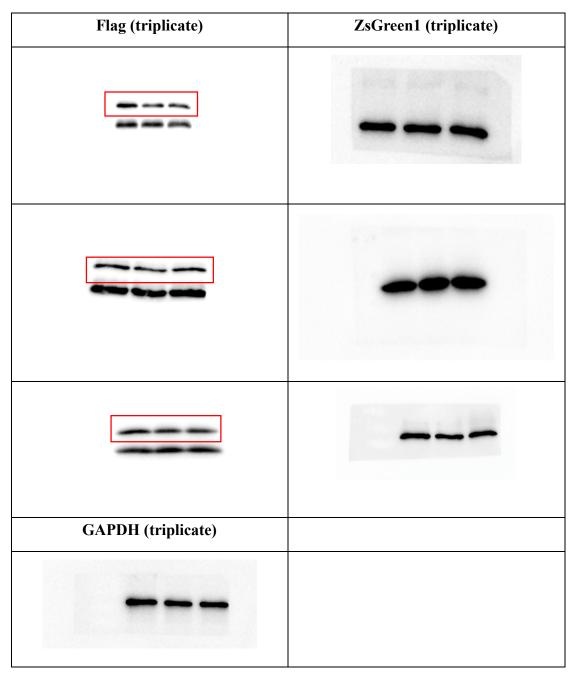
Control group, DNP group, DNP+FNT20µM group, and DNP+FNT40µM group.

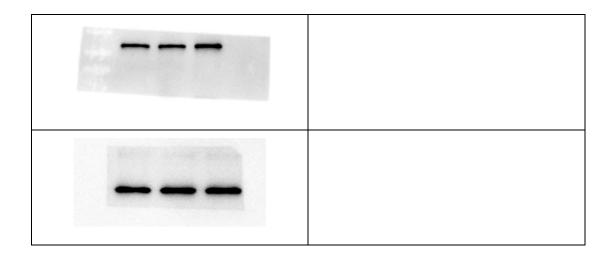
FcεRIβ(triplicate)
GAPDH (triplicate)



# Figure 4F

From left to right: Control group, FNT20µM group, and FNT40µM group.





# Figure 4G

From left to right:

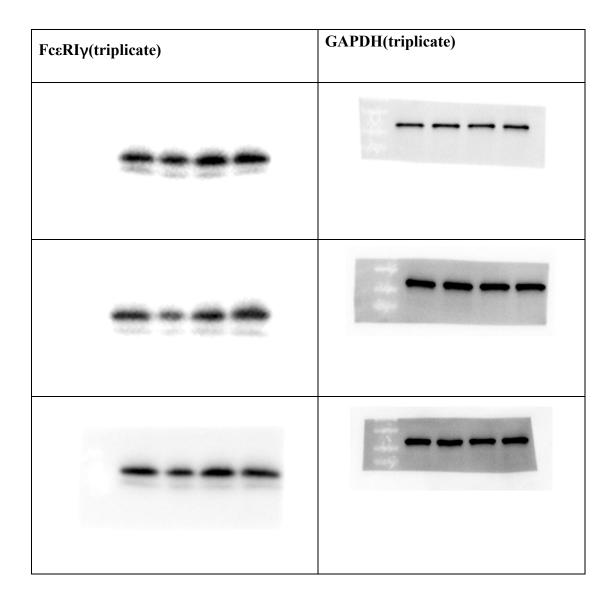
Control group, CHX pretreatment (200µM) for 1, 2, and 4 h without and with FNT treatment.

FceRIy(triplicate)	GAPDH(triplicate)

#### Figure 4H

From left to right:

Control group, FNT20µM group, MG132 group, and MG132 +FNT20µM group.

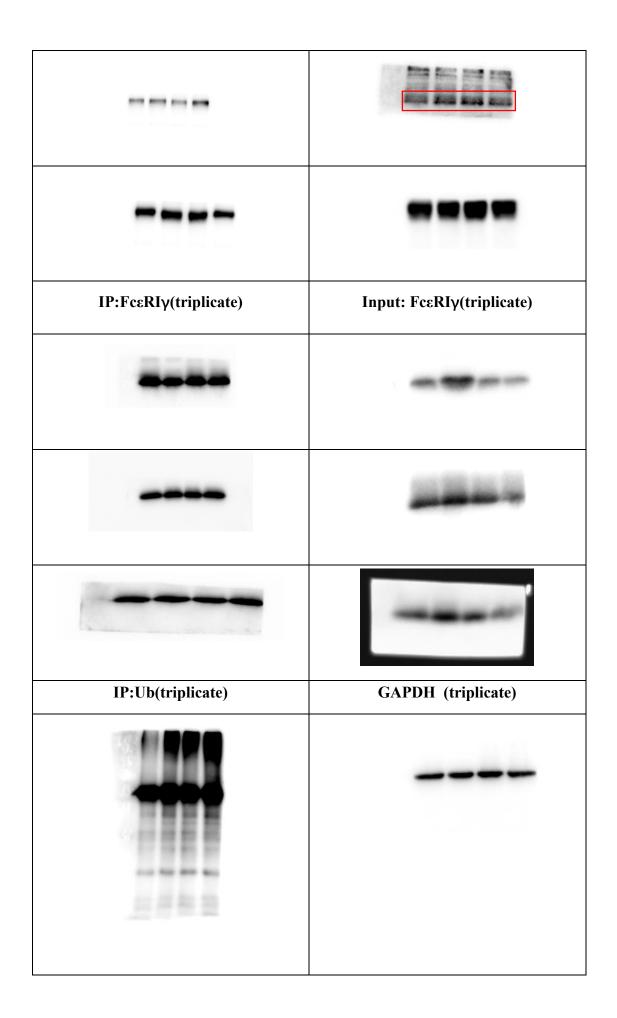


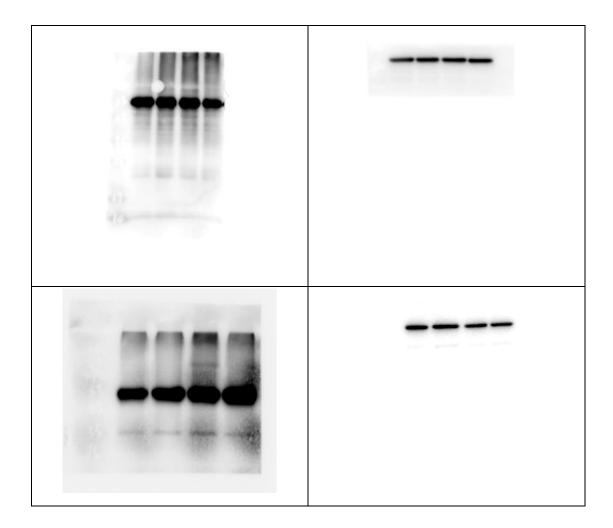
# Figure 4E, Figure 5A

RBL-2H3 IP:FcεRIγ

From left to right: Control group, DNP group, DNP+FNT20µM group, and DNP+FNT40µM group.

IP:FcεRIα(triplicate)	IP:FcεRIβ(triplicate)





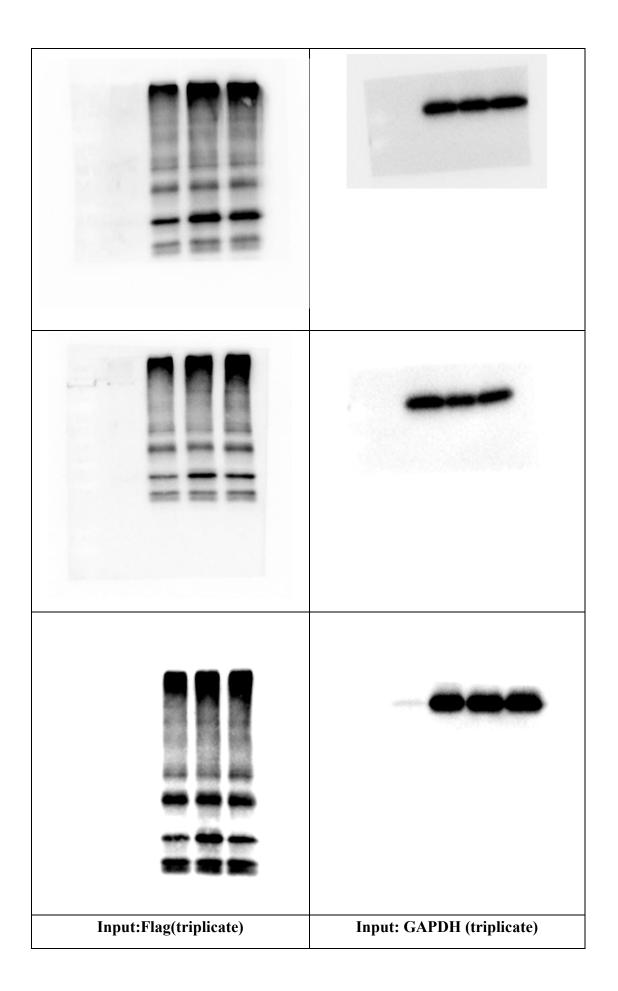
## Figure 5B

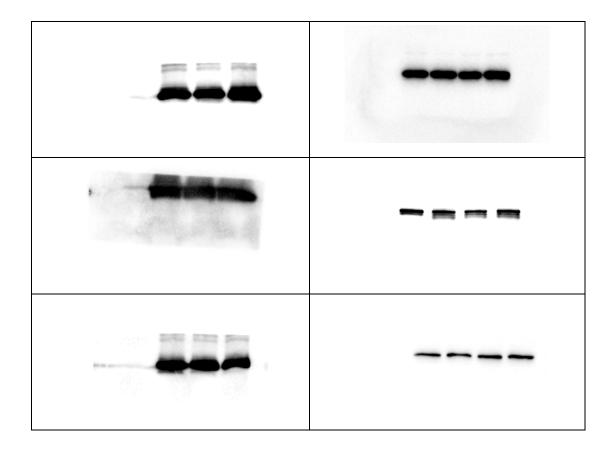
293T cells transfected with FccRIy-Flag and myc-ubiquitin (Ub) plasmids.

#### IP:FcεRIγ

From left to right: Control group,  $Fc \in RI\gamma$ -Flag and myc-ubiquitin (Ub),  $Fc \in RI\gamma$ -Flag and myc-ubiquitin (Ub)+FNT20 $\mu$ M group, and  $Fc \in RI\gamma$ -Flag and myc-ubiquitin (Ub)+FNT40 $\mu$ M group.

IP:Myc(triplicate)	IP:Flag(triplicate)
--------------------	---------------------

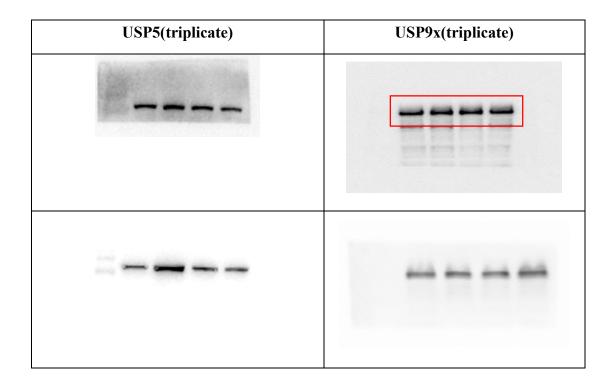


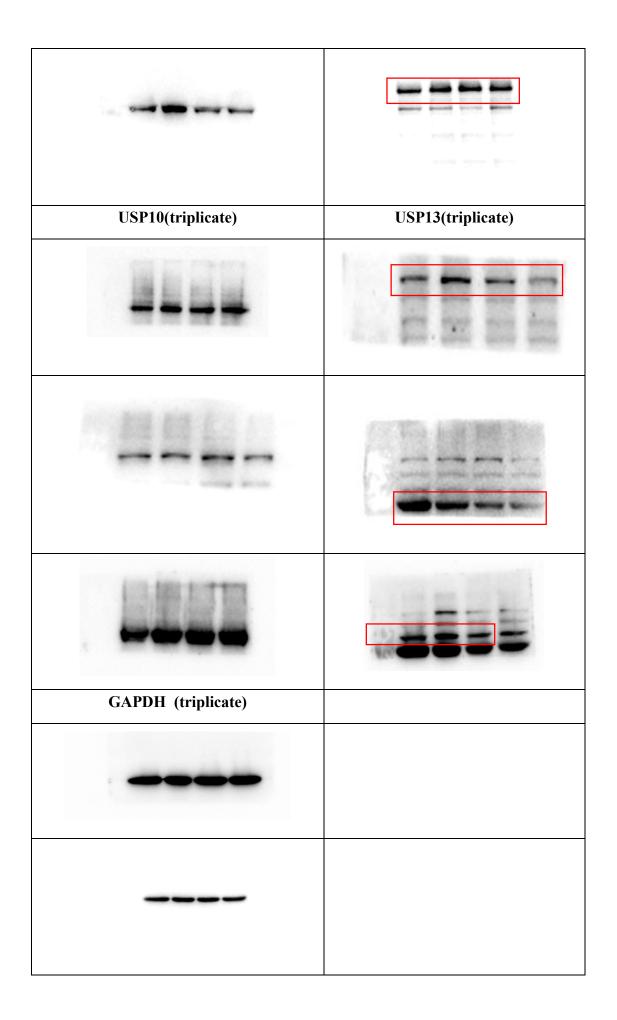


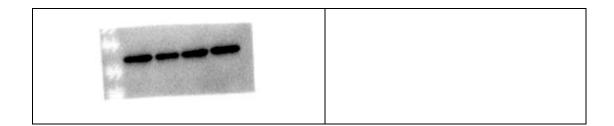
# Figure 5C

From left to right:

Control group, DNP group, DNP+FNT20 $\mu$ M group, and DNP+FNT40 $\mu$ M group.





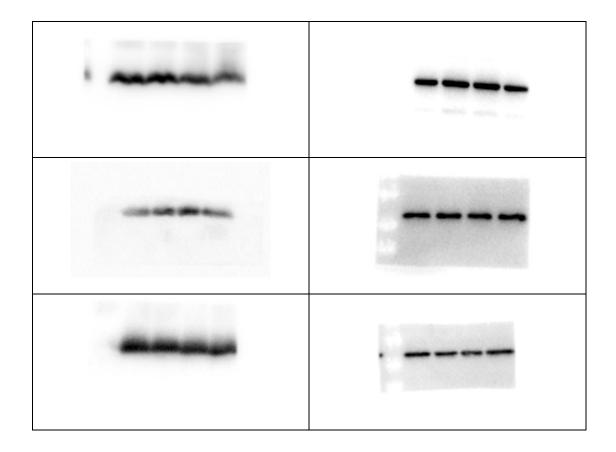


# Figure 5D

### RBL-2H3 IP:FcERIy

From left to right: Control group, DNP group, DNP+FNT20µM group, and DNP+FNT40µM group.

IP: USP5	IP: USP13
Input: FcεRIγ	GAPDH



# Supplementary Figure 1

From left to right: RBLs, RBLs/Fc&RIy-Flag.

ZsGreen1 (triplicate)	Flag(triplicate)
-	-
-	-

GAPDH (triplicate)	FcεRIγ (triplicate)
****	