Supplementary information for:

Fingolimod reduces circulating tight-junction protein levels and in vitro peripheral blood mononuclear cells migration in multiple sclerosis patients

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Supplementary Table S1

Correlation between serum tight-junction protein levels and clinical and MRI features

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	RR at baseline	RR at T_{12}	EDSS at baseline	EDSS at T_{12}	New MRI T2-weighted lesions	MRI T1 GAD$^+$ lesions
OCLN	0.01	0.34	-0.25	-0.27	-0.25	-0.14
CLN-5	-0.02	0.18	-0.31	-0.39	0.12	-0.12
ZO-1	-004	-0.14	0.32	0.23	-0.05	-0.23

RR = relapse rate; T_{12} = at 12 months of therapy; EDSS = expanded disability status scale; GAD$^+$ = gadolinium enhancing lesions; OCLN = occludin; CLN-5 = claudin-5; ZO-1 = zonula occludens -1. The results are expressed as r values. Spearman rank correlation was calculated. No r value is statistically significant.
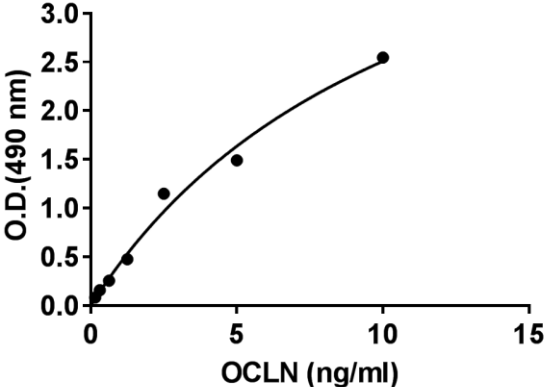
Supplementary Figure S1: Representative ELISA standard curves of recombinant occludin (OCLN) **(A)**, claudin-5 (CLN-5) **(B)** and zonula occludens-1 (ZO-1) **(C)**. O.D. = optical density.

Supplementary Figure S2: Titration ELISA curves of recombinant occludin (OCLN) **(A)**, claudin-5 (CLN-5) **(B)** and zonula occludens-1 (ZO-1) **(C)**. O.D. = optical density. NHS = normal healthy subjects. MS = multiple sclerosis. The results are expressed as mean absorbance values (read at 490 nm wavelength) ±SEM of triplicate values of serum samples from 2 NHS and 2 MS patients. In all curves, background absorbance values obtained omitting serum samples were subtracted to the absorbance values of serum samples.
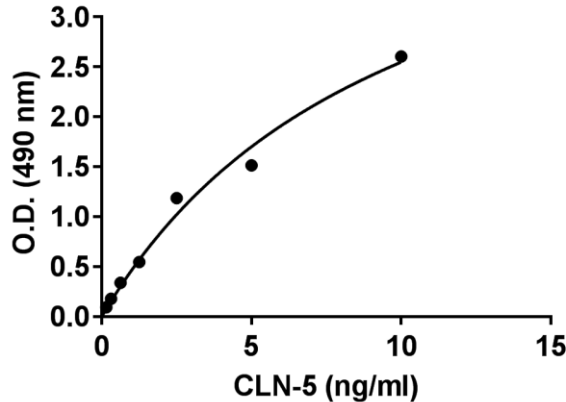
Supplementary Figure S3: Competitive ELISA of respective tight-junction proteins in the presence of increasing concentrations of occludin (OCLN) or bovine serum albumin (BSA) **(A)**, of claudin-5 (CLN-5) or BSA **(B)** and of zonula occludens-1 (ZO-1) or BSA **(C).** O.D. = optical density. Each point is the mean of triplicate values.
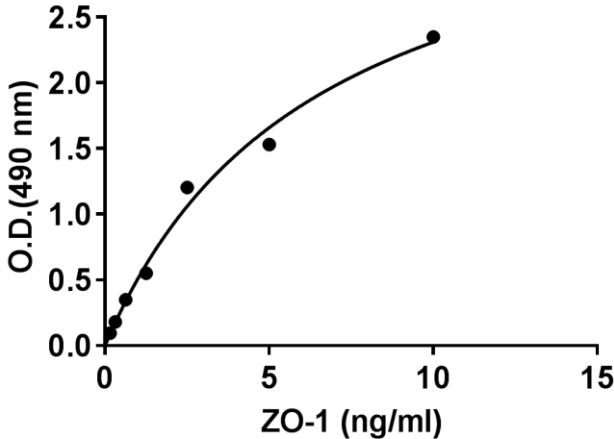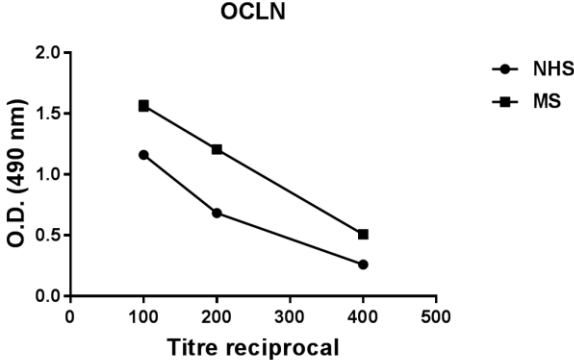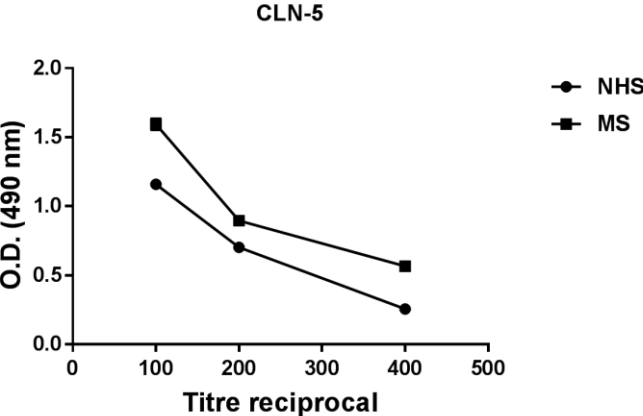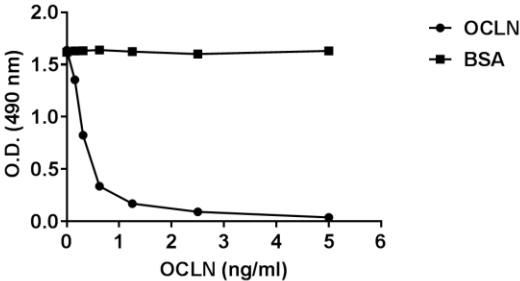
A

B

C

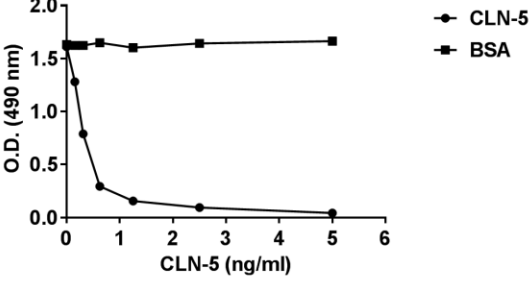**Supplementary Figure S2**

A

OCLN

B

CLN-5

C

ZO-1

Supplementary Figure S3

A

B

C