

## Supplementary Material

### **Transport of dietary anti-inflammatory peptide, $\gamma$ -glutamyl valine ( $\gamma$ -EV), across the intestinal Caco-2 monolayer**

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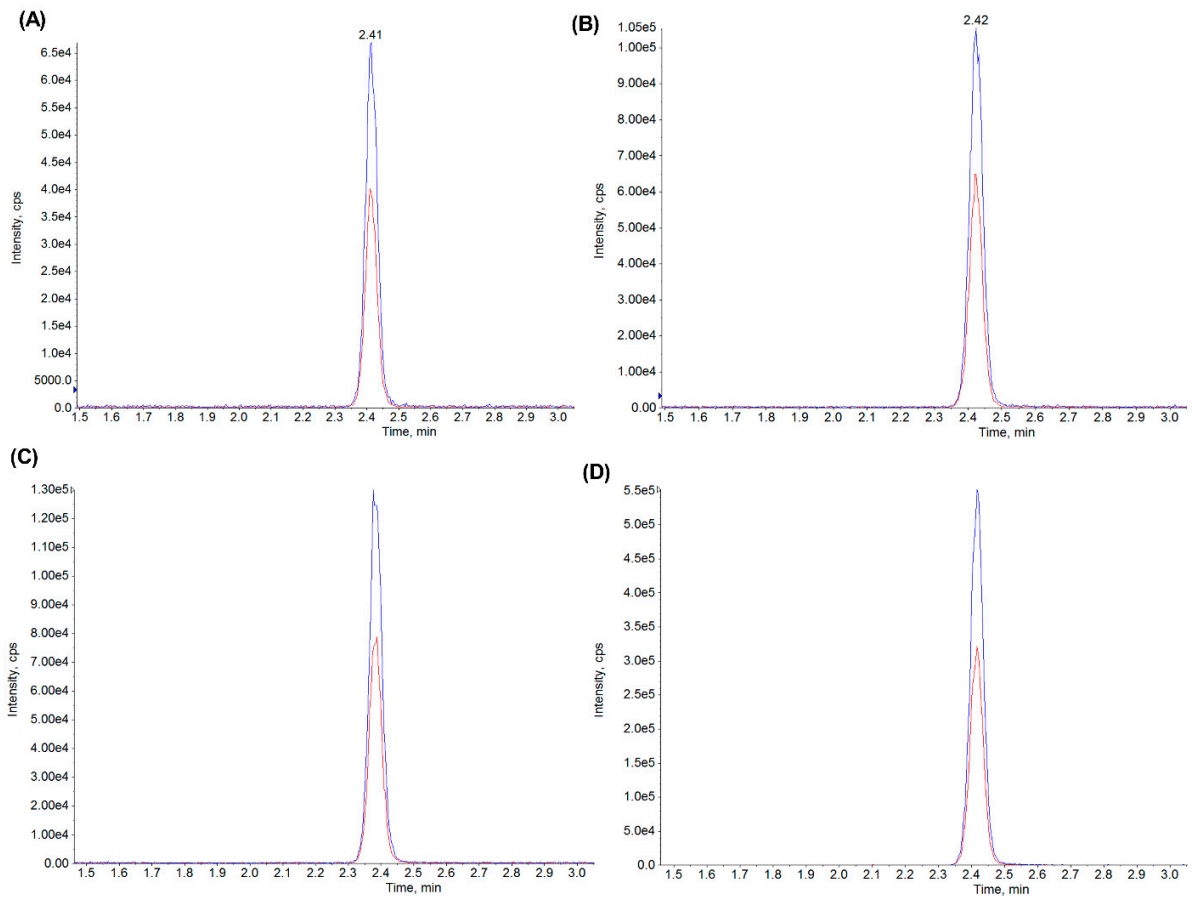
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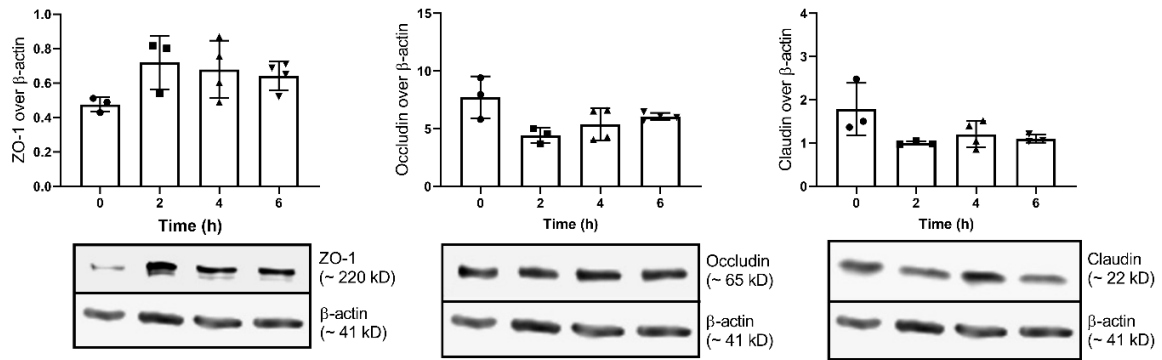
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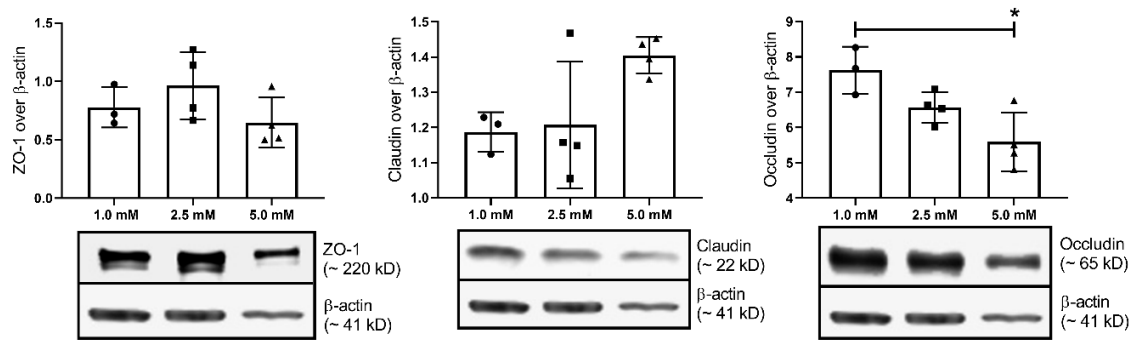
## FIGURES



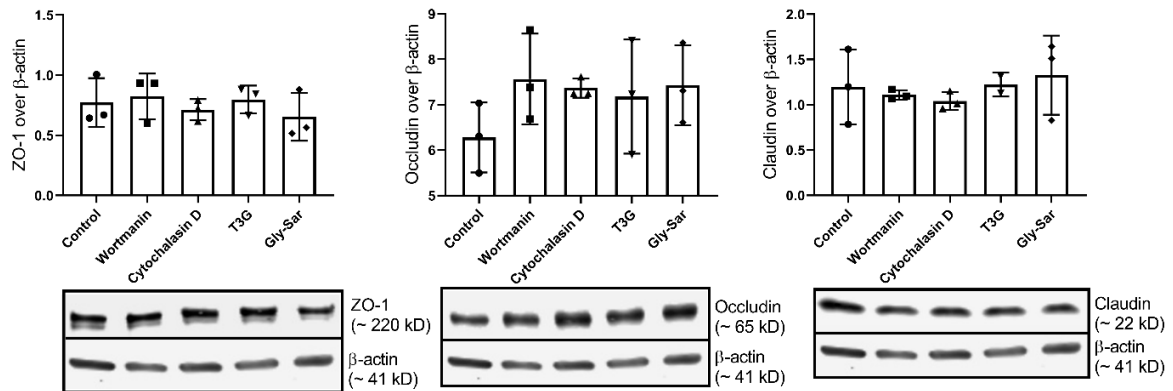
**Figure S1: Stability of  $\gamma$ -EV during transport through the Caco-2 monolayer cells.** (A) MRM chromatogram of  $\gamma$ -EV in the basolateral solution after 4 h of transport. (B) MRM chromatogram of  $\gamma$ -EV in the basolateral solution after 6 h of transport. (C) MRM chromatogram of  $\gamma$ -EV in the basolateral solution after 2 h of transport for the 2.5 mM dose. (D) MRM chromatogram of  $\gamma$ -EV in the basolateral solution after 2 h of transport for the 5 mM dose.



**Figure S2: Western immunoblotting of the tight junction proteins for the time-dependent transport study of  $\gamma$ -EV.** The expression levels of the three tight junction proteins, (A) ZO-1, (B) Occludin, and (C) Claudin-1, did not differ significantly among the different time periods of 2, 4, and 6 h, during the transport of  $\gamma$ -EV across the Caco-2 monolayer cells. Data presented as the mean  $\pm$  SD of at least three independent experiments.



**Figure S3: Western immunoblotting of the tight junction proteins for the dose-dependent transport study of  $\gamma$ -EV.** The expression levels of the tight junction proteins, (A) ZO-1, and (B) Claudin-1, did not differ significantly among the different doses of 1, 2.5, and 5 mM during the transport of  $\gamma$ -EV across the Caco-2 monolayer cells. However, in case of (C) Occludin, a reduction ( $p < 0.05$ ) was seen in the case of 5 mM dose during the transport. Data presented as the mean  $\pm$  SD of at least three independent experiments. Statistically, the data are represented as  $p < 0.001$  for (\*\*\*),  $p < 0.01$  for (\*\*), and  $p < 0.05$  for (\*).



**Figure S4: Western immunoblotting of the tight junction proteins for the mechanism of transport study of  $\gamma$ -EV.** The expression levels of the three tight junction proteins, (A) ZO-1, (B) Occludin, and (C) Claudin-1, did not differ significantly among the different transport inhibitor treatments (wortmannin, cytochalasin D, TF3'G, and Gly-Sar), during the transport of  $\gamma$ -EV across the Caco-2 monolayer cells. Data presented as the mean  $\pm$  SD of at least three independent experiments.