

# Correction: Glutamate transporters: a broad review of the most recent archaeal and human structures

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It has come to the attention of the authors that a citation for Figure 4 was omitted from the caption. The caption should read:

**Figure 4. Predicted anion permeation pathway.**

A  $\text{Glt}_{ph}$  monomer viewed from the trimerization interface. The residues R276 and M395 responsible for the anion selectivity are indicated. The orange circles represent ‘snapshots’ of the path of a chloride ion through the channel between the two domains. Part of the scaffold domain has been removed for clarity. Figure adapted from [49].

Additionally, some references were incorrectly cited in the second paragraph of the section ‘Uncoupled Chloride Conductance’. The paragraph should read:

Initially, chloride permeation was proposed to occur along TM2 [47]. The Ser to Val mutation on TM2 (residue 65 in  $\text{Glt}_{ph}$  and 103 in EAAT1) strongly affected chloride permeation [8,47]. The  $\text{Glt}_{ph}$  structure in an intermediate OFC suggested that there was an aqueous cavity that might serve as a permeation pathway for anions [14]. Subsequent research has suggested that substrate transport and anion permeation proceed through two mutually exclusive pathways separated by a flexible wall domain and facilitated by the conformational changes [48,49]. The moving flexible wall is composed of several residues in HP1, HP2 hairpins and TM8 (Figure 4), the movement of which dictate the pathway [49]. Arg276 in HP1 and Met395, predicted to line the anion pore [49], were shown to exhibit a significant  $\text{Cl}^-$  selectivity over  $\text{Na}^+$  in both simulations and experiments: anion selectivity is impaired by the insertion of negatively charged side chains at specific positions. In contrast with previous research [48], mutations of Ser65 did not affect anion permeation. Presumably, therefore, Ser65 (Ser103) is part of the channel-opening mechanism but not of the permeation pathway. As the permeation pathway accounted for all known functional properties of EAAT/ $\text{Glt}_{ph}$  anion channels during simulations, it is the most likely mechanism of uncoupled chloride conductance.

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