

GlyT2 Antibody / SLC6A5 [clone 29S38] (RQ8847)

Catalog No.	Formulation	Size
RQ8847	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

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Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	29S38
Purity	Affinity chromatography
UniProt	Q9Y345
Applications	Western Blot : 1:500-1:2000
Limitations	This GlyT2 antibody is available for research use only.



Western blot testing of human SH-SY5Y cell lysate with GlyT2 antibody. Predicted molecular weight ~87 kDa.

Description

GlyT2 (Sodium- and chloride-dependent glycine transporter 2), a member of the solute carrier family 6, is responsible for the reuptake of glycine from the synaptic cleft back into the presynaptic neuron. This process is essential for maintaining optimal levels of glycine in the brain, which is crucial for the proper functioning of inhibitory neurotransmission. Without GlyT2, excessive glycine levels can lead to hyperexcitability of neurons, potentially causing neurodevelopmental disorders. While GlyT2 plays a critical role in maintaining glycine homeostasis, dysregulation of this protein can have detrimental effects on the brain. Mutations in the SLC6A5 gene encoding GlyT2 have been linked to hyperekplexia, a rare neurological disorder characterized by exaggerated startle responses and muscle stiffness. Understanding the function of

GlyT2 is essential for developing targeted therapies for individuals affected by hyperekplexia. Researchers have made significant strides in unraveling the molecular mechanisms underlying the function of GlyT2. Studies have identified key amino acids and motifs within the protein that are essential for its transport activity and interaction with glycine.

Application Notes

Optimal dilution of the GlyT2 antibody should be determined by the researcher.

Immunogen

A synthetic peptide specific to human Sodium- and chloride-dependent glycine transporter 2 protein was used as the immunogen for the GlyT2 antibody.

Storage

Store the GlyT2 antibody at -20oC.