

GlyT2 (H-155): sc-30129

BACKGROUND

Na⁺/Cl⁻ dependent neurotransmitter transporters are a superfamily of transmembrane proteins that contain 12 membrane spanning regions. Specifically, the highly hydrophobic Na⁺/Cl⁻ dependent glycine transporters (GlyT) are crucial for the termination of neurotransmission at glycinergic synapses. Two different GlyT genes encode GlyT2 and GlyT1, which exists as two isoforms produced by alternative splicing of the same gene located on human chromosome 1p31.3. The GlyT1 gene may be an early marker of neural development and encodes glia-specific transporter proteins. Although GlyT1 and GlyT2 are both expressed in the brain and spinal cord, each shows a unique pattern of expression. GlyT1 is found only in the white matter of the CNS, whereas GlyT2 is found in the gray matter of the CNS as well as in macrophages and mast cells in peripheral tissues. The anatomic distribution of GlyT2 mRNA suggests that glycine may act as a supraspinal neurotransmitter and may function as a chemical messenger outside the CNS.

CHROMOSOMAL LOCATION

Genetic locus: SLC6A5 (human) mapping to 11p15.1; Slc6a5 (mouse) mapping to 7 B5.

SOURCE

GlyT2 (H-155) is a rabbit polyclonal antibody raised against amino acids 50-204 mapping near the N-terminus of GlyT2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

GlyT2 (H-155) is recommended for detection of GlyT2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

GlyT2 (H-155) is also recommended for detection of GlyT2 in additional species, including equine and bovine.

Suitable for use as control antibody for GlyT2 siRNA (h): sc-41976, GlyT2 siRNA (m): sc-41977, GlyT2 shRNA Plasmid (h): sc-41976-SH, GlyT2 shRNA Plasmid (m): sc-41977-SH, GlyT2 shRNA (h) Lentiviral Particles: sc-41976-V and GlyT2 shRNA (m) Lentiviral Particles: sc-41977-V.

Molecular Weight (predicted) of GlyT2: 87 kDa.

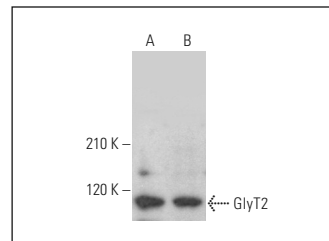
Molecular Weight (observed) of GlyT2: 90-110 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or COLO 205 whole cell lysate: sc-364177.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



GlyT2 (H-155): sc-30129. Western blot analysis of GlyT2 expression in HeLa (A) and COLO 205 (B) whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **GlyT2 (B-4): sc-390090**, our highly recommended monoclonal alternative to GlyT2 (H-155).