

GlyR β (h): 293T Lysate: sc-115142

BACKGROUND

In the central nervous system (CNS), glycine-mediated inhibitory neurotransmission is essential to voluntary motor control and reflex responses. Glycine binds to glycine receptors (GlyR) in the postsynaptic neuronal membranes. GlyR, γ -aminobutyric acid, serotonin and acetylcholine comprise an evolutionally conserved superfamily of ligand-gated ion channels. The pentameric subunit structure of GlyR consists of two types of glycosylated membrane proteins, α 1 through α 4 and β , and an associated peripheral membrane protein, which combine to form a chloride-selective ion channel. In humans, the composition of the pentamer changes from α 2 subunits in the fetal CNS to α 1 and β subunits in the adult CNS. Fast potentiation of GlyR by intracellular Ca^{2+} in the brainstem and midbrain indicate an important role for Ca^{2+} in modulation of glycinergic synapses.

REFERENCES

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- Wasmuth, J.J. 1992. A comparison of three methods to produce a high resolution physical map of 11 genes on the distal region of the long arm of human chromosome 5: radiation hybrid mapping, pulsed-field gel electrophoresis and fluorescent *in situ* hybridization. *Am. J. hum. Genet.* 51: A248.

CHROMOSOMAL LOCATION

Genetic locus: GLRB (human) mapping to 4q32.1.

PRODUCT

GlyR β (h): 293T Lysate represents a lysate of human GlyR β transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

GlyR β (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive GlyR β antibodies. Recommended use: 10-20 μ l per lane.

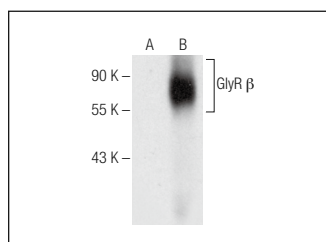
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

GlyR β (G-1): sc-390156 is recommended as a positive control antibody for Western Blot analysis of enhanced human GlyR β expression in GlyR β transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



GlyR β (G-1): sc-390156. Western blot analysis of GlyR β expression in non-transfected: sc-117752 (A) and human GlyR β transfected: sc-115142 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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