

β -Arrestin-2 (h2): 293T Lysate: sc-176429

BACKGROUND

The members of the G protein-coupled receptor family are distinguished by their slow transmitting response to ligand binding. These seven transmembrane proteins include the adrenergic, serotonin and dopamine receptors. The effect of the signaling molecule can be excitatory or inhibitory depending on the type of receptor to which it binds. Members of the β -Arrestin family regulate receptor binding to G proteins. β -Arrestins have been found to be located at postsynaptic sites, where they are thought to act in concert with β ARK (β ARK-1, also designated GRK 2, or β ARK-2, also designated GRK 3) to regulate G protein-coupled neurotransmitter receptors. Expression of β -Arrestin-1 and β -Arrestin-2 is seen predominantly in spleen and neuronal tissues. It has been shown that β -Arrestin-1 expression is modulated by intracellular cAMP, which may be a novel mechanism for the regulation of receptor-mediated responses.

REFERENCES

1. Hausdorff, W.P., et al. 1990. Two kinases mediate agonist-dependent phosphorylation and desensitization of the β 2-adrenergic receptor. Symp. Soc. Exp. Biol. 44: 225-240.
2. Cotecchia, S., et al. 1990. Multiple second messenger pathways of α -adrenergic receptor subtypes expressed in eukaryotic cells. J. Biol. Chem. 265: 63-69.
3. Attramadal, H., et al. 1992. β -Arrestin-2, a novel member of the Arrestin/ β -Arrestin gene family. J. Biol. Chem. 267: 17882-17890.
4. Dolph, P.J., et al. 1993. Arrestin function in inactivation of G protein-coupled receptor rhodopsin *in vivo*. Science 260: 1910-1916.
5. Parruti, G., et al. 1993. Molecular analysis of human β -Arrestin-1: cloning, tissue distribution, and regulation of expression. Identification of two isoforms generated by alternative splicing. J. Biol. Chem. 268: 9753-9761.
6. Barak, L.S., et al. 1995. The conserved seven-transmembrane sequence NP(X)₂3Y of the G-protein-coupled receptor superfamily regulates multiple properties of the β 2-adrenergic receptor. Biochemistry 34:15407-15414.

CHROMOSOMAL LOCATION

Genetic locus: ARRB2 (human) mapping to 17p13.2.

PRODUCT

β -Arrestin-2 (h2): 293T Lysate represents a lysate of human β -Arrestin-2 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.

PROTOCOLS

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

APPLICATIONS

β -Arrestin-2 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive β -Arrestin-2 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.

RESEARCH USE

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