

Visual Arrestin (PDS-1): sc-32744

BACKGROUND

Members of the Arrestin/ β -Arrestin protein family are thought to participate in agonist-mediated desensitization of G protein-coupled receptors, and cause specific dampening of cellular responses to stimuli such as hormones, neurotransmitters or sensory signals. Visual Arrestin, also known as Arrestin, retinal S-antigen or S-Arrestin, is a major soluble photoreceptor protein that regulates light-dependent signal transduction through G protein-coupled receptor (rhodopsin) activation. Visual Arrestin is expressed in retinal photoreceptor cells and the pineal gland. Visual Arrestin is the major pathogenic autoantigen in inflammatory eye disease, such as uveoretinitis and Oguchi disease, a rare autosomal recessive form of night blindness.

REFERENCES

1. Banga, J.P., et al. 1988. Analysis of antigenic determinants of retinal S-antigen with monoclonal antibodies. *Invest. Ophthalmol. Vis. Sci.* 29: 12-21.
2. Palczewski, K., et al. 1989. Regulation of rhodopsin dephosphorylation by Arrestin. *J. Biol. Chem.* 264: 15770-15773.
3. Yamaki, K., et al. 1990. Structural organization of the human S-antigen gene. cDNA, amino acid, intron, exon, promoter, *in vitro* transcription, retina and pineal gland. *J. Biol. Chem.* 265: 20757-20762.
4. Roberts, A.J., et al. 1992. Induction of experimental autoimmune uveoretinitis in Lewis rats with purified recombinant human retinal S-antigen fusion protein. *Eur. J. Immunol.* 22: 951-956.
5. Saga, M., et al. 2004. Gene analysis and evaluation of the single founder effect in Japanese patients with Oguchi disease. *Jpn. J. Ophthalmol.* 48: 350-352.
6. LocusLink Report (LocusID: 6295). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: SAG (human) mapping to 2q37.1; Sag (mouse) mapping to 1 D.

SOURCE

Visual Arrestin (PDS-1) is a mouse monoclonal antibody raised against Visual Arrestin of porcine origin.

PRODUCT

Each vial contains 200 μ g IgG₁ 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.

PROTOCOLS

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

APPLICATIONS

Visual Arrestin (PDS-1) is recommended for detection of Visual Arrestin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

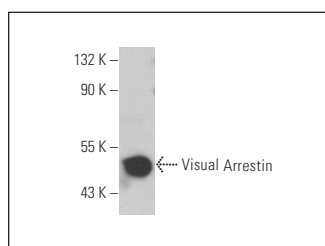
Visual Arrestin (PDS-1) is also recommended for detection of Visual Arrestin in additional species, including porcine.

Suitable for use as control antibody for Visual Arrestin siRNA (h): sc-45467, Visual Arrestin siRNA (m): sc-45468, Visual Arrestin shRNA Plasmid (h): sc-45467-SH, Visual Arrestin shRNA Plasmid (m): sc-45468-SH, Visual Arrestin shRNA (h) Lentiviral Particles: sc-45467-V and Visual Arrestin shRNA (m) Lentiviral Particles: sc-45468-V.

Molecular Weight of Visual Arrestin: 48 kDa.

Positive Controls: rat eye extract: sc-364805, Y79 cell lysate: sc-2240 or ARPE-19 whole cell lysate: sc-364357.

DATA



Visual Arrestin (PDS-1): sc-32744. Western blot analysis of Visual Arrestin expression in human retina tissue extract.

RESEARCH USE

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