

ARG22271 anti-Rhodopsin antibody [4D2]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [4D2] recognizes Rhodopsin
Tested Reactivity	Hu, Ms, Rat, Amph, Bird, Fsh, Mamm, Shark
Species Does Not React With	Invt
Tested Application	ELISA, ICC/IF, IHC-P, IP, WB
Specificity	Detects ~40kDa. Binds specifically to the N-terminus of Rhodopsin. Does not detect Rhodopsin in invertebrates.
Host	Mouse
Clonality	Monoclonal
Clone	4D2
Isotype	IgG1
Target Name	Rhodopsin
Species	Bovine
Immunogen	Bovine Rhodopsin
Conjugation	Un-conjugated
Alternate Names	Rhodopsin; Opsin-2; CSNBAD1; RP4; OPN2

Application Instructions

Application table	Application	Dilution
	ELISA	Assay-dependent
	ICC/IF	Assay-dependent
	IHC-P	Assay-dependent
	IP	Assay-dependent
	WB	1:1000

Application Note * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

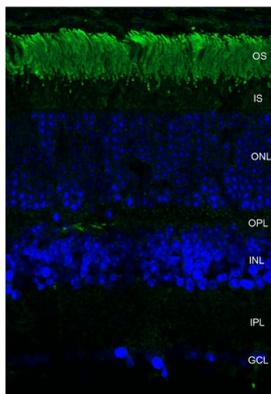
Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.09% Sodium azide and 50% Glycerol
Preservative	0.09% Sodium azide

Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	RHO
Gene Full Name	rhodopsin
Background	Retinitis pigmentosa is an inherited progressive disease which is a major cause of blindness in western communities. It can be inherited as an autosomal dominant, autosomal recessive, or X-linked recessive disorder. In the autosomal dominant form, which comprises about 25% of total cases, approximately 30% of families have mutations in the gene encoding the rod photoreceptor-specific protein rhodopsin. This is the transmembrane protein which, when photoexcited, initiates the visual transduction cascade. Defects in this gene are also one of the causes of congenital stationary night blindness. [provided by RefSeq, Jul 2008]
Function	Photoreceptor required for image-forming vision at low light intensity. Required for photoreceptor cell viability after birth. Light-induced isomerization of 11-cis to all-trans retinal triggers a conformational change leading to G-protein activation and release of all-trans retinal. [UniProt]
Calculated Mw	39 kDa
PTM	Phosphorylated on some or all of the serine and threonine residues present in the C-terminal region. Contains one covalently linked retinal chromophore.
Cellular Localization	Membrane

Images



ARG22271 anti-Rhodopsin antibody [4D2] IHC image

Immunohistochemistry: Mouse retina stained with ARG22271 anti-Rhodopsin antibody [4D2] at 1:1000 dilution. Other layers of the retina: IS - inner segment; ONL - outer nuclear layer; OPL - outer plexiform layer; INL - inner nuclear layer; IPL - inner plexiform layer; GCL - ganglion cell layer.