

## Datasheet for ABIN6655050

# anti-Rho-related GTP-binding protein antibody





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Quantity:	100 μg
Target:	Rho-related GTP-binding protein (RhO (pan))
Reactivity:	Cow
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Rho-related GTP-binding protein antibody is un-conjugated
Application:	ELISA, Western Blotting (WB), Immunohistochemistry (IHC), Immunoprecipitation (IP), Immunofluorescence (IF), Fluorescence Microscopy (FM)

### **Product Details**

Purpose:	Rhodopsin Antibody
Immunogen:	Rhodopsin Antibody was produced in mice by repeated immunizations raised against bovine Rhodopsin.
Clone:	1D4
Isotype:	lgG1
Cross-Reactivity (Details):	A BLAST analysis was used to suggest cross-reactivity with Rhodopsin from all vertebrates based on 100 % homology with the immunizing sequence.
Purification:	Anti-Rhodopsin Antibody was purified by Protein G chromatography.
Sterility:	Sterile filtered

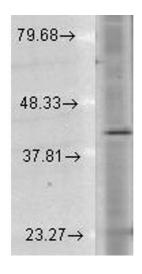
## **Target Details**

Target:	Rho-related GTP-binding protein (RhO (pan))	
Alternative Name:	RHO (RhO (pan) Products)	
Background:	Synonyms: OPN2 Antibody, opsd Antibody, opsin 2 Antibody, opsin 2 rod pigment Antibody,	
	opsin2 Antibody, RHO Antibody, RP4 Antibody, MGC138309 Antibody, Retinitis Pigmentosa 4	
	Antibody, Rhodopsin Antibody	
	Background: Rhodopsin consists of the protein moiety opsin and a reversibly covalently bound	
	cofactor, retinal. Opsin, a bundle of seven membrane embedded alpha-helices, binds retinal, a	
	photoreactive chromophore, in a central pocket. In addition to being the pigment of the retina	
	that is responsible for both the formation of the photoreceptor cells, its function is to	
	specifically convey information stored in the specific geometry of the chormophore to the	
	surface of the molecule upon light absorption. In the active state, rhodopsin activates	
	transduction, a GTP binding protein. Once activated, transduction promotes the hydrolysis of	
	cGMP by phosphodiesterase. Rhodopsin's activity is believed to be shut off by its	
	phosphorylation followed by binding of the soluble protein arrestin. Mutations in the rhodopsir	
	gene lead to retinitis pigmentosa, which can be inherited as an autosomal dominant, an	
	autosomal recessive or an X-linked recessive disorder.	
	Gene Name: RHO	
Gene ID:	509933	
NCBI Accession:	NP_001014890	
JniProt:	P02699	
Application Details		
Application Notes:	Immunoprecipitation_Dilution: User Optimized	
	ELISA_Dilution: 1:200	
	Immunohistochemistry_Dilution: User Optimized	
	IF_Microscopy_Dilution: User Optimized	
	Western_Blot_Dilution: 1:1000	
Comment:	Anti-Rhodopsin Antibody is tested for use in IF microscopy, IHC, IP, WB, and ELISA. Expect a	
	band approximately $\sim\!40\text{kDa}$ corresponding to specific lysates. Binds specifically to the N-	
	terminus of Rhodopsin. Specific conditions for reactivity should be optimized by the end user.	

### Handling

Format:	Liquid
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: 50 % (v/v) Glycerol
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiry Date:	12 months

#### **Images**



### **Western Blotting**

**Image 1.** Rhodopsin Western Blot. Western Blot of mouse anti-Rhodopsin antibody. Lane 1: Human Cell lines. Primary antibody: Rhodopsin antibody at 1:1000 for overnight at 4°C. Secondary antibody: Goat anti-mouse IgG HRP secondary antibody at 1:10,000 for 45 min at RT. Block: 5% Blotto overnight 4°C. Predicted/Observed size: 38.8 kDa/40kD. Other band(s): none.