

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

# Product datasheet for TA385917

### Rhodopsin (RHO) Rabbit Monoclonal Antibody [Clone ID: Rho 1D4]

#### **Product data:**

Product Type:	Primary Antibodies
Clone Name:	Rho 1D4
Applications:	ELISA, IF, IHC, IP, WB
Reactivity:	Mouse, Rat, Cow, Human, Zebrafish
Host:	Rabbit
lsotype:	lgG, kappa
Clonality:	Monoclonal
Immunogen:	Bleached bovine rod outer segment (ROS).
Specificity:	The antibody binds to the C-terminus of rhodopsin on the cytoplasmic side of disk membranes. The epitope has the following amino acid sequence: 'TETSQVAPA'. A limitation of the 1D4 tag, however, is that it has to be placed at the C-terminus of a protein. This is because the Rho1D4 monoclonal antibody requires a free carboxylate group for high affinity binding. Amidation of the carboxyl group lowers its immunoreactivity to the Rho1D4 antibody by over 100 fold. The antibody binds to the C-terminus of rhodopsin on the cytoplasmic side of disk membranes. Rhodopsin is the major pigment in rod photoreceptors and belongs to the family of G-protein-coupled receptors (GPCRs). The linear epitope (TETSQVAPA) can be used as a protein tag.
Formulation:	PBS with 0.02% Proclin 300.
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Please store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C. Avoid freeze and thaw cycles.
Stability:	3 years from dispatch.
Gene Name:	rhodopsin
Database Link:	Entrez Gene 6010 Human P08100



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Synonyms:

#### CSNBAD1; MGC138309; MGC138311; OPN2; Opsin-2; rhodopsin; RP4

## **Product images:**



Western Blot using anti-Rhodopsin antibody Rho 1D4 (TA385917) Rat eye lysate (35µg protein in RIPA buffer) was resolved on a 10% SDS PAGE gel and blots probed with the chimeric rabbit version of Rho 1D4 (TA385917) at 0.0001 µg/ml before detection using an anti-rabbit secondary antibody. A primary incubation of 1h was used and protein was detected by chemiluminescence. The expected band size for monomeric rat ( Rattus norvegicus ) Rhodopsin is 39.0kDa, though this protein in known to form dimers and higher order multimers (c.f. Mansoor et al., PMID: 16492772, PMID: 10798675). TA385917 successfully detected monomeric, dimeric and multimeric Rhodopsin in rat eye lysate.

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