

# **Product datasheet for TA385917**

#### OriGene Technologies, Inc.

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## 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

Isotype: IgG, 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

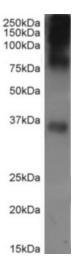
P08100





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.