

## Anti-Rhodopsin [Rho 1D4] Bulk Size Ab00337-6.1-BT

This chimeric rat antibody was made using the variable domain sequences of the original mouse IgG1 format for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Rat IgG1, Kappa

**Clone Number:** Rho 1D4

**Alternative Name(s) of Target:** Rho-tag; Visual Purple

**UniProt Accession Number of Target Protein:** P08100

**Published Application(s):** IP, Radioimmune labeling, WB, ELISA, IF, IHC

**Published Species Reactivity:** Cow, Human, Zebrafish, Amphibians, Rat, Mouse

**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.

**Application Notes:** 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.

**Antibody First Published in:** Molday et al. 1983 Monoclonal antibodies to rhodopsin: characterization, cross-reactivity, and application as structural probes. *Biochemistry*, 1983; 22(3):653-660 [PMID:6188482](#)

**Note on publication:** Describes the generation of two monoclonal antibodies from hybridoma.

## Product Form

**Size:** 1 mg Purified antibody in bulk size.

**Purification:** Protein A affinity purified

**Supplied In:** PBS only.

**Storage Recommendation:** Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic

procedures for humans or animals.