

Anti-Rhodopsin [Rho 1D4] Standard Size Ab00337-6.1

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: 200 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. 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.