

Datasheet for ABIN7600869  
**anti-RP2 antibody (AA 244-348)**



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## Overview

Quantity:	100 µg
Target:	RP2
Binding Specificity:	AA 244-348
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This RP2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Flow Cytometry (FACS), Immunocytochemistry (ICC)

## Product Details

Purpose:	Anti-RP2 Antibody Picoband® (monoclonal, 3D7)
Immunogen:	E. coli-derived human RP2recombinant protein (Position: D244-M348).
Clone:	3D7
Isotype:	IgG2b
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-RP2 Antibody Picoband® (monoclonal, 3D7) (ABIN7600869). Tested in Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

## Product Details

Purification: Immunogen affinity purified.

## Target Details

Target: RP2

Alternative Name: RP2 ([RP2 Products](#))

Background: Synonyms: Protein XRP2, RP2

Tissue Specificity: Ubiquitous. Expressed in the rod and cone photoreceptors, extending from the tips of the outer segment (OS) through the inner segment (IS) and outer nuclear layer (ONL) and into the synaptic terminals of the outer plexiform layer (ONL). Also detected in the bipolar, horizontal and amacrine cells in the inner nuclear layer (INL), extending to the inner plexiform layer (IPL) and through the ganglion cell layer (GCL) and into the nerve fiber layer (NFL) (at protein level).

Background: Protein XRP2 is a protein that in humans is encoded by the RP2 gene. It is mapped to Xp11.3. The RP2 locus has been implicated as one cause of X-linked retinitis pigmentosa. The predicted gene product shows homology with human cofactor C, a protein involved in the ultimate step of beta-tubulin folding. Progressive retinal degeneration may therefore be due to the accumulation of incorrectly folded photoreceptor or neuron-specific tubulin isoforms followed by progressive cell death. The RP2 protein is also involved in regulating the function and extension of outer segment of cone photoreceptors in mice.

Molecular Weight: 40 kDa

Gene ID: 6102

UniProt: [O75695](#)

Pathways: [Nucleotide Phosphorylation](#), [Ribonucleoside Biosynthetic Process](#)

## Application Details

Application Notes: Western blot, 0.1-0.5 µg/mL, Human, Mouse, Rat

Immunocytochemistry/Immunofluorescence, 2 µg/mL, Human

Flow Cytometry (Fixed), 1-3 µg/1×10<sup>6</sup> cells, Human

1. Chapple, J. P., Hardcastle, A. J., Grayson, C., Spackman, L. A., Willison, K. R., Cheetham, M. E. Mutations in the N-terminus of the X-linked retinitis pigmentosa protein RP2 interfere with the normal targeting of the protein to the plasma membrane. Hum. Molec. Genet. 9: 1919-1926, 2000. 2. Evans, R. J., Schwarz, N., Nagel-Wolfrum, K., Wolfrum, U., Hardcastle, A. J., Cheetham, M. E. The retinitis pigmentosa protein RP2 links pericentriolar vesicle transport between the

Application Details

	Golgi and the primary cilium. Hum. Molec. Genet. 19: 1358-1367, 2010.
Restrictions:	For Research Use only
Handling	
Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05 mg NaN <sub>3</sub> .
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.