

Product datasheet for TA336927

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

OriGene Technologies, Inc.

RP1 Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: ICC/IF, IHC, WB

Recommended Dilution: Western Blot: 2.0 ug/ml, Immunohistochemistry-Paraffin: 1:400, Immunohistochemistry:

1:400, Immunocytochemistry/ Immunofluorescence: 1:50 - 1:100

Reactivity: Human, Mouse

Host: Rabbit

Clonality: Polyclonal

Immunogen: A synthetic peptide made to a C-terminal portion of the human RP1 protein (between

residues 2000-2156) [UniProt P56715]

Formulation: PBS, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid

freeze-thaw cycles.

Concentration: lot specific

Purification: Immunogen affinity purified

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 240 kDa

Gene Name: retinitis pigmentosa 1 (autosomal dominant)

Database Link: NP 006260

Entrez Gene 19888 MouseEntrez Gene 6101 Human

P56715





Background:

Retinitis pigmentosa 1 (RP1), also known as oxygen-regulated protein 1, retinitis pigmentosa 1 protein, ORP1, and DCDC4A, regulates the stability and length of microtubule based axoneme of photoreceptors. RP1 is critical for the differentiation of photoreceptor cells, and RP1 also influences the photosensitivity and outer segment morphogenesis of rod photoreceptors. Similarly, RP1 controls the correct orientation and higher order stacking of the outer segment disks along the photoreceptor axoneme. RP1 is found in the cytoplasm and has only been reported in the retina. RP1 is subject to phosphorylation, and mutations in RP1 cause autosomal recessive and dominant retinitis pigmentosa. Both of these diseases lead to degeneration of the retinal photoreceptor cells resulting in night blindness, loss of peripheral visual field, and eventually loss of central vision (PMID: 10391211).

Synonyms: DCDC4A; ORP1

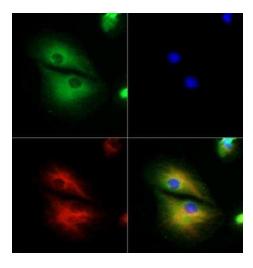
Note: This RP1 antibody is useful for Western blot, Immunocytochemistry/Immunofluorescence,

and Immunohistochemistry on paraffin embedded sections. In Western blot a band was observed ~ 240 kDa. In ICC/IF cytoplasmic staining was observed in Arpe-19 cells. Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is

recommended.

Protein Families: Druggable Genome

Product images:



Immunocytochemistry/Immunofluorescence: RP1 Antibody TA336927 - RP1 antibody was tested in ARPE-19 cells with DyLight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red).





Immunohistochemistry: RP1 Antibody TA336927 - IHC analysis of RP1 in mouse retina.