

For Research Use Only

RDH12 Polyclonal antibody

Catalog Number: 31859-1-AP

1 Publications



Basic Information

Catalog Number:

31859-1-AP

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG30460

GenBank Accession Number:

BC025724

GeneID (NCBI):

145226

UNIPROT ID:

Q96NR8

Full Name:

retinol dehydrogenase 12 (all-trans/9-cis/11-cis)

Calculated MW:

316 aa, 35 kDa

Observed MW:

35 kDa

Purification Method:

Antigen affinity Purification

Recommended Dilutions:

WB: 1:1000-1:4000

Applications

Tested Applications:

WB, ELISA

Cited Applications:

WB

Species Specificity:

human

Cited Species:

human

Positive Controls:

WB : HEK-293T cells,

Background Information

Retinol dehydrogenase 12 (RDH12) is a member of the short-chain dehydrogenase/reductase (SDR) superfamily. This NADPH-dependent enzyme is highly expressed in the photoreceptor inner segments of the retina, where it functions as a key component of the visual cycle. RDH12 catalyzes the reduction of all-trans-retinal to all-trans-retinol, a critical step in regenerating the visual chromophore 11-cis-retinal. Mutations in the RDH12 gene cause autosomal recessive retinitis pigmentosa (RP) and Leber congenital amaurosis (LCA), severe inherited retinal dystrophies characterized by early-onset vision loss and photoreceptor degeneration. Loss of RDH12 activity leads to accumulation of toxic all-trans-retinal, triggering oxidative stress and cell death. RDH12 also exhibits retinoid-binding properties and may play additional roles in lipid metabolism and cellular stress responses beyond its enzymatic function in the visual cycle.

Notable Publications

Author	Pubmed ID	Journal	Application
Polina Pavlova	41683787	Int J Mol Sci	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

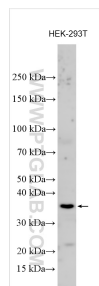
T: 4006900926

E: Proteintech-CN@ptglab.com

W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 31859-1-AP (RDH12 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.