

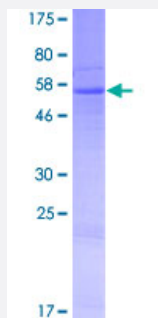
Full-Length

RDH8 (Human) Recombinant Protein (P01)

Catalog # H00050700-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human RDH8 full-length ORF (AA46480.1, 1 a.a. - 311 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MAAAPRTVLISGCSSGIGLELAVQLAHDPPKKRYQVVATMRDLGKKETLEAAAGEALGQTLTVAQL
DVCSDSEVAQCLSCIQGEVDVLVNNAGMGLVGPLEGLSLAAMQNVFDTNFFGAVRLVKAVLPG
MKRRRQGHIVISSVMGLQGVIFNDVYAASKFALEGFFESLAIQLLQFNIFISLVEPGPVVTEFEGKL
LAQVSMAEFPGTDPETLHYFRDLYLPASRKLFCSVGQNPQDVVQAIMNVISSTRPPLRRQTNIRYS
PLTTLKTVDSGSLYVRTTHRLLFRCPRLLNLGLQCLSCGCLPTRVRPR

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

61.16

Interspecies Antigen Sequence

Mouse (82); Rat (83)

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Note

Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — RDH8

Entrez GeneID[50700](#)**GeneBank Accession#**[BC146479](#)**Protein Accession#**[AA46480.1](#)**Gene Name**

RDH8

Gene Alias

PRRDH, SDR28C2

Gene Description

retinol dehydrogenase 8 (all-trans)

Omim ID[608575](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

All-trans-retinol dehydrogenase (RDH8) is a visual cycle enzyme that reduces all-trans-retinal to all-trans-retinol in the presence of NADPH (Rattner et al., 2000 [PubMed 10753906]). It is a member of the short chain dehydrogenase/reductase family and is located in the outer segments of photoreceptors; hence it is also known as photoreceptor retinol dehydrogenase. It is important in the visual cycle by beginning the rhodopsin regeneration pathway by reducing all-trans-retinal, the product of bleached and hydrolysed rhodopsin (Rando, 2001 [PubMed 11710234]). This is a rate-limiting step in the visual cycle (Saari et al., 1998 [PubMed 9667000]).[supplied by OMIM]

Other Designations

photoreceptor outer segment all-trans retinol dehydrogenase|short chain dehydrogenase/reductase family 28C, member 2

Pathway

- [Metabolic pathways](#)
- [Retinol metabolism](#)