

## Recombinant Human RDH12, His-tagged

Cat. No. RDH12-31307TH    Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant fragment of Human RDH12 (amino acids 39-316) fused to His tag at N-terminus; 303aa, 33.5kDa.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	278 amino acids
<b>Description</b>	The protein encoded by this gene is an NADPH-dependent retinal reductase whose highest activity is toward 9-cis and all-trans-retinol. The encoded enzyme also plays a role in the metabolism of short-chain aldehydes but does not exhibit steroid dehydrogenase activity. Defects in this gene are a cause of Leber congenital amaurosis type 3 (LCA3).
<b>Conjugation</b>	HIS
<b>Molecular Weight</b>	33.500kDa inclusive of tags
<b>Tissue specificity</b>	Widely expressed, mostly in eye, kidney, brain, skeletal muscle and stomach.
<b>Form</b>	Liquid
<b>Purity</b>	>90% by SDS-PAGE

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<b>Storage buffer</b>	pH: 8.00 Constituents: 0.32% Tris HCl, 1.17% Sodium chloride, 0.03% DTT, 40% Glycerol
<b>Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
<b>Sequences of amino acids</b>	MGSSHHHHHH SSGLVPRGSH MGSMSIRAF AEGFL AEEKQLHILI NNAGVMMCPY SKTADGFETH LGVNH LGHFL LTYLLLERLK VSAPARVVNV SSVAHHIGKI PFHDLQSEKR YSRGFAYCHS KLANVLFTRE LAKRLQGTGV TTYAVHPGVV RSELVRHSSL LCLLWRLFSP FVKTAREGAQ TSLHCAL AEG LEPLSGKYFS GKVVV ITGANTGIGK ETARELASRG ARVYIACRDV LKGESAASEI RVDTKNSQVL VRKLDLSDTKDCKRTWVSPR ARNNKTAERL WNVSCCELLGI RWE
<b>Sequence Similarities</b>	Belongs to the short-chain dehydrogenases/reductases (SDR) family.

## GENE INFORMATION

<b>Gene Name</b>	RDH12 retinol dehydrogenase 12 (all-trans/9-cis/11-cis) [ Homo sapiens ]
<b>Official Symbol</b>	RDH12
<b>Synonyms</b>	RDH12; retinol dehydrogenase 12 (all-trans/9-cis/11-cis); retinol dehydrogenase 12 (all trans and 9 cis); retinol dehydrogenase 12; FLJ30273; LCA13; SDR7C2; short chain dehydrogenase/reductase family 7C; member 2;
<b>Gene ID</b>	145226
<b>mRNA Refseq</b>	NM_152443
<b>Protein Refseq</b>	NP_689656

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<b>MIM</b>	608830
<b>Uniprot ID</b>	Q96NR8
<b>Chromosome Location</b>	14q24.1
<b>Pathway</b>	Metabolic pathways, organism-specific biosystem; Retinol metabolism, organism-specific biosystem; Retinol metabolism, conserved biosystem; Visual signal transduction: Cones, organism-specific biosystem; Visual signal transduction: Rods, organism-specific biosystem;
<b>Function</b>	nucleotide binding; oxidoreductase activity; retinol dehydrogenase activity;

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