

# Product information



## RDH12, 39-316aa

Human, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP1371

**Full name:** Retinol dehydrogenase 12

**NCBI Accession No.:** NP\_689656

**Synonyms:** LCA13, LCA3, SDR7C2

**Description:** Retinol dehydrogenase 12, also known as RDH12, belongs to the short-chain dehydrogenases /reductases (SDR) family. RDH12 is expressed, mostly in eye, kidney, brain, skeletal muscle and stomach. It is an NADPH-dependent retinal reductase whose highest activity is toward 9-cis and all-trans-retinol. RDH12 also plays a role in the metabolism of short-chain aldehydes but does not exhibit steroid dehydrogenase activity. Recombinant human RDH12 protein, fused to His-tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography techniques.

**Form:** Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 2mM DTT, 40% glycerol, 0.2M NaCl

**Molecular Weight:** 33.5 kDa (303aa), confirmed by MALDI-TOF

**Purity:** > 90% by SDS - PAGE

**Concentration:** 0.25 mg/ml (determined by Bradford assay)

(kDa)

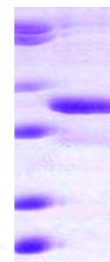
57

40

28

18

13.5



15% SDS-PAGE (3ug)

### Sequences of amino acids:

MGSSHHHHH SSGLVPRGSH MGSHEMGKVVV ITGANTGIGK ETARELASRG ARVYIACRDV LKGESAASEI RVDTKNSQVL VRKLDLSDTK  
SIRAF AEGFL AEEKQLHILI NNAGVMMCPY SKTADGFETH LGVNLGHFL LTYLLLERLK VSAPARVVNV SVAHHIGKI PFHDLQSEKR  
YSRGFAYCHS KLANVLFTR E LAKRLQGTGV TTYAVHPGVV RSELVRHSSL LCLLWRLFSP FVKTAREGAQ TSLHCALAEG LEPLSGKYFS  
DCKRTWVSPR ARNNKTAERL WNVSCCELLGI RWE

### General references:

Maeda A., *et al.* (2006) *J Biol Chem.* 281:37697-37704.

Keller B., *et al.* (2007) *J Steroid Biochem Mol Biol.* 104:190-194.

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.



Immuno-Biological Laboratories, Inc. (IBL-America)  
8201 Central Ave. NE, Suite P, Minneapolis, Minnesota 55432, USA  
Phone: (888) 523-1246 Fax.: (763) 780-2988  
Email: [info@ibl-america.com](mailto:info@ibl-america.com) Web: [www.ibl-america.com](http://www.ibl-america.com)