## **Product information**



**ALAD**, 1-330 aa

Human, His-tagged, Recombinant, E.coli

Cat. No. IBATGP1444

Full name: Delta-aminolevulinic acid dehydratase NCBI Accession No.: NP 000022

Synonym: ALADH, PBGS

Description: The ALAD enzyme is composed of 8 identical subunits and catalyzes the condensation of 2 molecules of delta-aminolevulinate to form porphobilinogen (a precursor of heme, cytochromes and other hemoproteins). ALAD catalyzes the second step in the porphyrin and heme biosynthetic pathway; zinc is essential for enzymatic activity. ALAD enzymatic activity is inhibited by lead and a defect in the ALAD structural gene can cause increased sensitivity to lead poisoning and acute hepatic porphyria. Recombinant human ALAD protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

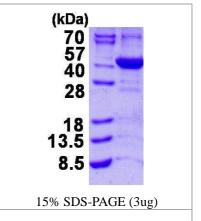
Form: Liquid. 20mM Tris-HCl buffer (pH8.0) containing 10% glycerol

0.1M NaCl

Molecular Weight: 38.8 kDa (354aa), confirmed by MALDI-TOF

Purity: > 85% by SDS - PAGE

Concentration: 1.0 mg/ml (determined by Bradford assay)



## Sequences of amino acids:

MGSSHHHHHH SSGLVPRGSH MGSHMQPQSV LHSGYFHPLL RAWQTATTTL NASNLIYPIF VTDVPDDIQP ITSLPGVARY GVKRLEEMLR PLVEEGLRCV LIFGVPSRVP KDERGSAADS EESPAIEAIH LLRKTFPNLL VACDVCLCPY TSHGHCGLLS ENGAFRAEES RQRLAEVALA YAKAGCQVVA PSDMMDGRVE AIKEALMAHG LGNRVSVMSY SAKFASCFYG PFRDAAKSSP AFGDRRCYQL PPGARGLALR AVDRDVREGA DMLMVKPGMP YLDIVREVKD KHPDLPLAVY HVSGEFAMLW HGAQAGAFDL KAAVLEAMTA FRRAGADIII TYYTPQLLQW LKEE

## **General references:**

Li,C.. et al. (2011) Toxicol. Lett. 203 (1), 48-53 van Bemmel et al. (2011) Epidemiology 22 (2), 273-278

**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.



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