

# Recombinant Human Aminolevulinate, Delta-, Synthase 2, His-tagged

**Cat. No.** ALAS2-419H    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant Human ALAS (aminolevulinate, delta-, synthase 2) (a.a. 136-553) with N-terminal His tag, MW = 46 kDa, expressed in an <i>E.Coli</i> expression system.                                                                                                                                                                                                                                                                                                                                            |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>ProteinLength</b>    | 136-553 a.a.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Description</b>      | Delta-aminolevulinate synthase 2 also known as ALAS2 is a protein which in humans is encoded by the ALAS2 gene. ALAS2 is an aminolevulinic acid synthase. The product of this gene specifies an erythroid-specific mitochondrially located enzyme. The encoded protein catalyzes the first step in the heme biosynthetic pathway. Defects in this gene cause X-linked pyridoxine-responsive sideroblastic anemia. Alternatively spliced transcript variants encoding different isoforms have been identified. |
| <b>Formulated In</b>    | 25 mM Tris-HCl, pH 8.0, 100 mM NaCl, 0.05% Tween-20, 20% glycerol, 3 mM DTT, 20 µM pyridoxal 5' phosphate monohydrate.                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Purity</b>           | 90%.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Application</b>      | Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.                                                                                                                                                                                                                                                                                                                                                                                                                     |

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**Stability** >6 months at -80°C.

## GENE INFORMATION

**Gene Name** [ALAS2 aminolevulinate, delta-, synthase 2 \[ Homo sapiens \]](#)

**Synonyms** ALAS2; aminolevulinate, delta-, synthase 2; ASB; ANH1; XLSA; ALASE; ALAS-E; FLJ93603; 5-aminolevulinate synthase 2; delta-ALA synthetase; 5-aminolevulinic acid synthase; delta-aminolevulinate synthase; 5-aminolevulinate synthase, erythroid-specific, mitochondrial; EC 2.3.1.37;aminolevulinate, delta-, synthase 2 (sideroblastic/hypochromic anemia); OTTHUMP00000023388; OTTHUMP00000023389

**Gene ID** [212](#)

**mRNA Refseq** [NM\\_000032](#)

**Protein Refseq** [NP\\_000023](#)

**MIM** [301300](#)

**UniProt ID** [P22557](#)

**Chromosome Location** Xp11.21

**Pathway** Glycine, serine and threonine metabolism; Metabolic pathways; Porphyrin and chlorophyll metabolism

**Function** 5-aminolevulinate synthase activity; acyltransferase activity; coenzyme binding; glycine binding; protein binding; pyridoxal phosphate binding; transferase activity,

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transferring nitrogenous groups

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