

Recombinant Human Iduronate 2-Sulfatase / IDS Protein (His tag)

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3th Edition

Synonyms:IDS;MPS2;SIDS

Description:Iduronate 2-Sulfatase, also known as IDS, is a member of the highly conserved sulfatase family of enzymes that catalyze the hydrolysis of O- and N-sulfate esters from a variety of substrates. The human Iduronate 2-Sulfatase/IDS consists of a signal peptide, a pro peptide and a mature chain that may be further processed into two chains. Among the identified 18 human sulfatases, Iduronate 2-Sulfatase/IDS is required for the lysosomal degradation of the glycosaminoglycans (GAG), heparan sulfate and dermatan sulfate. Multiple mutations in this X-chromosome localized gene result in Iduronate 2-Sulfatase/IDS enzymatic deficiency, and lead to the sex-linked Mucopolysaccharidosis Type II (MPS II), also known as Hunter Syndrome characterized by the lysosomal accumulation of the GAG and their excretion in urine. MPS II has a wide spectrum of clinical manifestations ranging from mild to severe due to the level of Iduronate 2-Sulfatase/IDS enzyme. Retroviral-mediated Iduronate 2-Sulfatase/IDS gene transfer into lymphoid cells would be a promising gene therapeutic strategy.

Form:PBS

Molecular Weight:61 kDa

Sequences:Met 1-Pro 550

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

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.