Recombinant Human FattyAcidSynthase protein (His Tag)

Catalog Number: PDEH101058

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

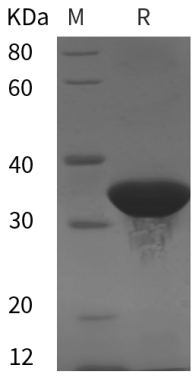
Description

Species	Human
Mol_Mass	34.1 kDa
Accession	P49327
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

FASN (Fatty Acid Synthase, also FAS) is a cytosolic 270-280 kDa member of the short chain dehydrogenase/reductase family 27X. It is expressed in neurons, skeletal muscle, adipocytes and hepatocytes, and both catalyzes the formation of palmitic acid from acetylCoA and malonylCoA, and likely mediates the transfer of fatty acids to peptides. Human FASN is 2511 amino acids (aa) in length ands contains multiple domains, including a beta-ketoacyl synthase domain (aa 1-414), an acyl and malonyl transferase domain (aa 429-817), an enoyl reductase domain (aa 1563-1863), a beta-ketoacyl reductase domain (aa 1864-2118) and a thioesterase domain (aa 2207-2511). FASN exists as an antiparallel homodimer. There is one theoretical alternative start site at Met2073. Over aa 9-212, human FASN shares 92% aa identity with mouse FASN.

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