Recombinant FAS protein (His tag)

Catalog Number	547019
Synonyms	Type I fatty acid synthase
Species	Human
Expression System	E. coli
Accession	P49327
Molecular Weight	Predictes a molecular mass of 33.45 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 33 kDa band.

Product Information

Sequence Region	2223-2511
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 2223-2511 aa (P49327) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant human Fatty Acid Synthase (FASN) fragment (residues 2223-2511) is a high-purity, stable protein unit ideal for structural biology and enzymatic studies. This 289-amino acid fragment was computationally optimized for solubility and stability, providing researchers with a reliable tool to investigate fatty acid biosynthesis mechanisms. Fatty Acid Synthase (FASN) is a multifunctional enzyme complex that catalyzes the de novo biosynthesis of long-chain saturated fatty acids using acetyl-CoA and malonyl-CoA substrates with NADPH as a cofactor. This essential metabolic enzyme integrates seven distinct catalytic activities within a single polypeptide chain, including acyl transferases, reductases, dehydratases, and thioesterase functions, all coordinated through an acyl carrier protein domain. FASN localizes primarily to the cytoplasm and has been identified in melanosomes, highlighting its role in diverse cellular processes. Recent studies also indicate that FASN activity supports SARS-CoV-2 replication, underscoring its potential relevance in viral pathogenesis research. The selected fragment (2223-2511) represents a structurally stable region suitable for detailed biochemical characterization.