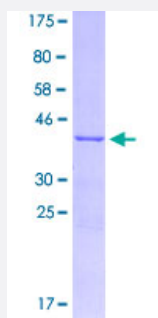


SCD (Human) Recombinant Protein (Q01)

Catalog # H00006319-Q01

Size 25 ug, 10 ug

Applications



Specification

Product Description	Human SCD partial ORF (NP_005054.3, 1 a.a. - 100 a.a.) recombinant protein with GST tag at N-terminal.
Sequence	MPAHLQDDISSSYTTTTTITAPPSRVLQNGGDKLETMPPLYLEDDIRPDIKDDIYDPTYKDKEGPSPK VEYVWRNIILMSLLHLGALYGITLIPTCKFYT
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	36.63
Interspecies Antigen Sequence	Mouse (71); Rat (64)
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — SCD

Entrez GeneID [6319](#)

GeneBank Accession# [NM_005063.4](#)

Protein Accession# [NP_005054.3](#)

Gene Name SCD

Gene Alias FADS5, MSTP008, SCD1

Gene Description stearyl-CoA desaturase (delta-9-desaturase)

Omim ID [604031](#)

Gene Ontology [Hyperlink](#)

Gene Summary Stearyl-CoA desaturase (SCD; EC 1.14.99.5) is an iron-containing enzyme that catalyzes a rate-limiting step in the synthesis of unsaturated fatty acids. The principal product of SCD is oleic acid, which is formed by desaturation of stearic acid. The ratio of stearic acid to oleic acid has been implicated in the regulation of cell growth and differentiation through effects on cell membrane fluidity and signal transduction. Four SCD isoforms, Scd1 through Scd4, have been identified in mouse. In contrast, only 2 SCD isoforms, SCD1 and SCD5 (MIM 608370), have been identified in human. SCD1 shares about 85% amino acid identity with all 4 mouse SCD isoforms, as well as with rat Scd1 and Scd2. In contrast, SCD5 shares limited homology with the rodent SCDs and appears to be unique to primates (Zhang et al. (1999) [PubMed 10229681]; Wang et al., 2005 [PubMed 15907797]).[supplied by OMIM]

Other Designations OTTHUMP00000020279|acyl-CoA desaturase|delta-9-desaturase|fatty acid desaturase|predicted protein of HQ0998|stearyl-CoA desaturase

Pathway

- [Biosynthesis of unsaturated fatty acids](#)
- [PPAR signaling pathway](#)

Disease

- [Alzheimer disease](#)
- [Cardiovascular Diseases](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Metabolic Syndrome X](#)
- [Neoplasms](#)
- [Obesity](#)
- [Osteoporosis](#)