www.innocyto.com

InnoCyto Inc.

15375 Barranca Pkwy, Suite I-103
Irvine, CA 92618
Email: info@innocyto.com
Phone: 1-949-418-7543

Human SURF1 Protein (C-Fc)

Catalog Number:	601901, 601902
Size:	25 ug, 100 ug
Target Name:	SURF1, Surfeit locus protein 1
Regulatory Status:	RUO

PRODUCT DETAILS

Application:	ELISA, BLI
Format:	Liquid, Purified
Expression Host:	CHO
Species:	Human
Accession Number:	Q15526
Sources:	Recombinant human SURF1 protein (Val98-Val265) with C-terminus Fc tag was expressed in CHO Cells.
Molecular Weight:	This protein has a predicted molecular weight of 45.3 kDa. Under DTT-reducing conditions, the protein migrates at approximately 50 kDa on SDS-PAGE.
Affinity Tag:	C-Fc
Purity:	>90% based on SDS-PAGE under reducing condition
Formulation:	1xPBS with 5mM DTT, pH 7.4 (0.2 μm filtered)
Endotoxin level:	Not tested
Protein Concentration:	25μg size is bottled at 0.2mg/mL concentration. 100 μg size is supplied at a lot-specific concentration.
Storage and Handling:	Briefly centrifuge the vial upon receipt. An unopened vial can be stored at 4°C for up to 2 weeks, or at -20°C or below for up to six months. The protein may be further diluted to 0.1 mg/mL using 0.22 μm-filtered PBS buffer (pH 7.4). For long-term storage, the diluted stock solution should be aliquoted and stored at ≤ –70°C to minimize freeze-thaw cycles. If additional dilution is required, carrier proteins such as FBS or BSA should be added to maintain protein stability.

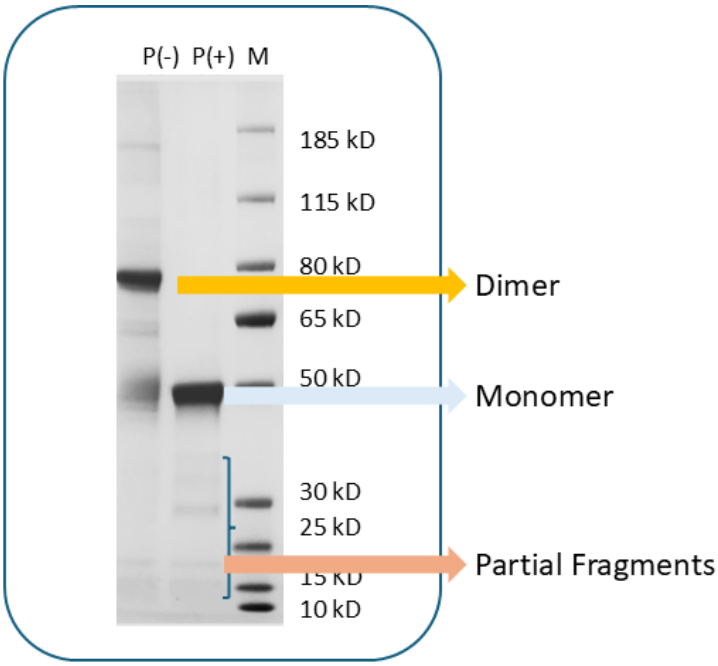
BACKGROUND INFORMATION

SURF1 is a mitochondrial inner membrane protein encoded by the SURF1 gene. Surf1 involves in the assembly of cytochrome c oxidase (COX), also known as complex IV of the respiratory chain. It contains multiple transmembrane domains and plays a crucial role in stabilizing early COX subunits during complex formation.

Mutations in SURF1 are a major cause of Leigh syndrome, a severe neurodegenerative disorder characterized by progressive brain lesions, motor delays, and mitochondrial dysfunction. These mutations lead to isolated COX deficiency, impairing energy production in high-demand tissues like the brain. SURF1 is therefore critical to mitochondrial function, and its dysfunction is strongly associated

with mitochondrial disease.

PRODUCT DATA



Purified human SURF1 (Val98-Val265) with C-terminus human IgG1-Fc tag final products on SDS-PAGE under non-reducing (P-) and reducing (P+) conditions (left panel). The purity of the protein is greater than 90% based on reducing conditions.