

Recombinant human Sulfatase Modifying Factor 1/SUMF1 protein

Catalog Number: ATGP3893

PRODUCT INFORMATION

Expression system

Baculovirus

Domain

34-374aa

UniProt No.

Q8NBK3

NCBI Accession No.

NP_877437.2

Alternative Names

SUMF1, AAPA3037, FGE, UNQ3037, Formylglycine-generating enzyme, C-alpha-formylglycine-generating enzyme 1, Sulfatase-modifying factor 1

PRODUCT SPECIFICATION

Molecular Weight

38.1 kDa (347aa)

Concentration

0.25mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 85% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

SUMF1, also known as sulfatase-modifying factor 1 isoform 1, is a Ca²⁺-binding member of the sulfatase-modifying factor family. This protein as soluble ER luminal glycoprotein converts inactive sulfatases into an active form by transforming a catalytic site cysteine into a formylglycine residue. In the ER, it can exist as either

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a monomer, or a disulfide-linked homodimer or a heterodimer with SUMF2. The genetic defect of FGly formation caused by mutations in the SUMF1 gene results in inactive FGE, and subsequently multiple sulfatase deficiency, a lysosomal storage disorder. Recombinant Human SUMF1, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

SQEAGTGAGA GSLAGSCGCG TPQRPGAHGS SAAAHRYRSRE ANAPGPVPG E RQLAHSKMVP IPAGVFTMGT DDPQIKQDGE
APARRVTIDA FYMDAYEVSN TEFEKFNST GYLTEAEKFG DSFVFEGMLS EQVKTNIQQA VAAAPWWLPV KGANWRHPEG
PDSTILHRPD HPVLHVSND AVAYCTWAGK RLPTEAEWEY SCRGLHNRL FPWGNKLPK GQHYANIWQG
EFPVTNTGED GFQGTAPVDA FPPNGYGLYN IVGNAWEWTS DWWTVHHSVE ETLNPKGPPS GKDRVKKGGS
YMCHRSYCYR YRCAARSQNT PDSSASNLGF RCAADRLPTM D<HHHHHH>

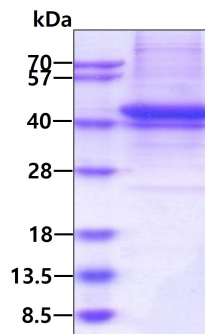
General References

Preusser-Kunze A., et al, (2005) J. Biol. Chem. 280:14900-14910.

Zito E., et al, (2005) EMBO Rep. 6:655-660.

DATA

SDS-PAGE



3 μ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.