Recombinant human Cathepsin F protein

Catalog Number: ATGP4026

PRODUCT INFORMATION

Expression system
Baculovirus

Domain
20-484aa

UniProt No.
Q9UBX1

NCBI Accession No.
NP_003784

Alternative Names
CTSF, CATSF, CLN13

PRODUCT SPECIFICATION

Molecular Weight
52.5kDa (474aa)

Concentration
0.25mg/ml (determined by Absorbance at 280nm)

Formulation
Liquid. In Phosphate-Buffered Saline (pH 7.4) containing 40% glycerol

Purity
> 90% by SDS-PAGE

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

Biological Activity
Specific activity is > 5 pmol/min/ug, and is defined as the amount of enzyme that hydrolyze 1pmole of Z-Phe-Arg-AMC to Z-Phe-Arg and AMC per minute at pH 5.0 at 37℃.

Tag
His-Tag

Application
SDS-PAGE, Enzyme Activity

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

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Description

Cathepsin F, also known as CTSF, belongs to the cathepsin family. Cathepsins are papain family cysteine proteinases that represent a major component of the lysosomal proteolytic system. This protein is thought to play a role in normal protein catabolism, and because it is highly expressed in some cancer cell lines, it may be involved in degradative processes occurring during tumor progression. The CTSF gene may function as a tumor suppressor in Gastric cancer and may be a potential therapeutic target in the treatment of Gastric cancer. It also can be used as an alternative way to test for the disease known as Opisthorchis Viverrini. Recombinant human Cathepsin F protein, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

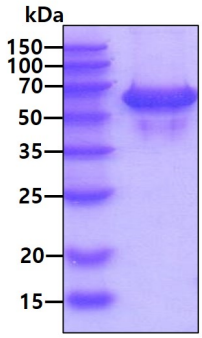
<ADL>APAQPRA ASFQAWGPPS PELLAPTRFA LEMFNRGRAA GTRAVLGLVR GRVRRAGQGS LYSLEATLEE PPCNDPMVCR LPVSKKTLLC SFQVLDELGR HVLLRKDCGP VDTKVPGAGE PKSAFTQGSA MISSLSQNHP DNRNETFSSV ISLLNEDPLS QDLPVKMASI FKNFVITYNR TYESKEEARW RLSVFVNNMV RAQKIQALDR GTAQYGVTKF SDLTEEEFRT IYLNTLLRKE PGNKMKQAKS VGDLAPPEWD WRSKGAVTKV KDQGMCGSCW AFSVTGNVEG QWFLNQGTLL SLSEQELLDC DKMDKACMGG LPSNAYSAIK NLGGLETEDD YSYQGHMQSC NFSAEKAKVY INDSVELSQN EQKLAAWLAK RGPISVAINA FGMQFYRHGI SRPLRPLCSP WLIDHAVLLV GYGNRSDVPF WAIKNSWGTD WGEKGYYYLH RGSGACGVNT MASSAVVD<HH HHHH>

General References

Schmitz J., et al, (2015) ChemMedChem. 10:1365-1377.
Ji C., et al, (2018) Oncol Res. 26:83-93.
Kulkarni G., et al, (2021) Schizophr Res. 228:435-437.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain