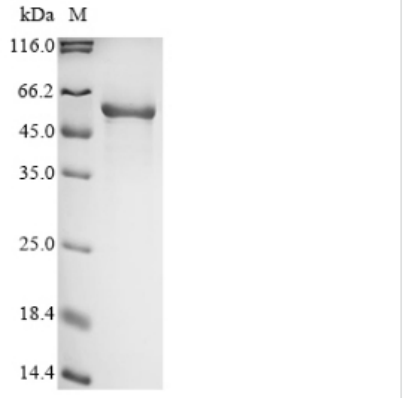
Recombinant Human Formimidoyltransferase-cyclodeaminase (FTCD)

Product Code	CSB-YP009029HU
Abbreviation	Recombinant Human FTCD protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	O95954
Form	Liquid or Lyophilized powder
Storage Buffer	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose.
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MSQLVECVPNFSEGKNQEVIDAISGAITQTPGCVLLDVDAGPSTNRTVYTFVG PPECVVEGALNAARVASRLIDMSRHQGEHPRMGALDVCPFIPVRGVSVDECV LCAQAFGQRLAEELDVPVYLYGEAARMDSRRTLPAIRAGEYEALPKKLQQAD WAPDFGPSSFVPSWGATATGARKFLIAFNINLLGTKEQAHRIALNLREQGRGK DQPGRLKKVQGIGWYLDEKNLAQVSTNLLDFEVTALHTVYEETCREAQELSLP VVGSQLVGLVPLKALLDAAAFYCEKENLFILEEEQRIRLVVSRLGLDSLCPFSPK ERIIEYLVPERGPERGLGSKSLRAFVGEVGARSAAPGGGSVAAAAAAMGAAL GSMVGLMTYGRRQFQSLDTTMRRLIPPFREASAKLTTLVDADAEAFTAYLEAM RLPKNTPEEKDRRTAALQEGLRRAVSVPLTLAETVASLWPALQELARCGNLAC RSDLQVAAKALEMGVFGAYFNVLINLRDITDEAFKDQIHHRVSSLLQEAKTQAA LVLDCLETRQE
Research Area	Others
Source	Yeast
Target Names	FTCD
Expression Region	1-541aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	C-terminal 6xHis-tagged
Mol. Weight	60 kDa
Protein Length	Full Length
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

Amino acids 1-541 form the expressed segment for recombinant Human FTCD. This FTCD protein is expected to have a theoretical molecular weight of 60 kDa. This protein is generated in a yeast-based system. The FTCD gene fragment has been modified by fusing the C-terminal 6xHis tag, providing convenience in detecting and purifying the recombinant FTCD protein during the following stages.

Human Formimidoyltransferase-Cyclodeaminase (FTCD) is a bifunctional enzyme involved in the histidine catabolic pathway. It consists of two domains: the formiminotransferase domain and the cyclodeaminase domain. In the formiminotransferase reaction, FTCD catalyzes the transfer of the formimino group from N-formimino-L-glutamate to tetrahydrofolate, producing formate and 5,10-methenyltetrahydrofolate. In the cyclodeaminase reaction, FTCD converts formiminoglutamate to formamide and ammonia. This enzyme plays a crucial role in maintaining histidine homeostasis and folate metabolism. Research on FTCD includes exploring its role in disorders related to histidine metabolism, understanding its impact on folate utilization, and investigating its potential implications in human health and diseases.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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