

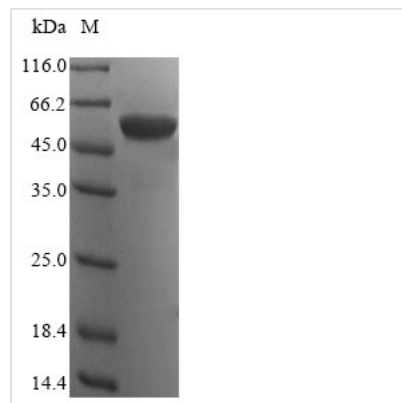


Recombinant Human ATP synthase subunit alpha, mitochondrial(ATP5F1A)

Product Code	CSB-YP002344HU
Relevance	Mitochondrial membrane ATP synthase (F1F0 ATP synthase or Complex V) produces ATP from ADP in the presence of a proton gradient across the membrane which is generated by electron transport complexes of the respiratory chain. F-type ATPases consist of two structural domains, F1 - containing the extramembraneous catalytic core, and F0 - containing the membrane proton channel, linked together by a central stalk and a peripheral stalk. During catalysis, ATP synthesis in the catalytic domain of F1 is coupled via a rotary mechanism of the central stalk subunits to proton translocation. Subunits alpha and beta form the catalytic core in F1. Rotation of the central stalk against the surrounding alpha3beta3 subunits leads to hydrolysis of ATP in three separate catalytic sites on the beta subunits. Subunit alpha does not bear the catalytic high-affinity ATP-binding sites
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.	P25705
Storage Buffer	Tris-based buffer,50% glycerol
Alias	ATP5A, ATP5AL2, ATPM
Product Type	Recombinant Protein
Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	QKTGTAEMSSILEERILGADTSVDLEETGRVLSIGDGIARVHGLRNVQAEEMVE FSSGLKGMSLNLEPDNVGVVVFVGNDKLIKEGDIVKRTGAIVDVPVGEELLGRVV DALGNAIDGKGPIGSKTRRRVGLKAPGIIPRISVREPMQTGIKAVDSLVPPIGRGQ RELIIGDRQTGKTSIAIDTIINQKRFNDGSDEKKKLYCIYVAIGQKRSTVAQLVKR LTDADAMKYTIVVSATASDAAPLQYLAPYSGCSMGEYFRDNGKHALIYDDLK QAVAYRQMSLLRRPPGREAYPGDVLYLHSRLLERAAMNDAFGGGSLTALP VIETQAGDVSAIYPTNVISITDGQIFLETIFYKGIKIRPAINVGLSVSRVGSAAQTR AMKQVAGTMKLELAQYREVAFAAQFGSDLDAATQQLSRGVRLTELLKQGQY SPMAIEEQVAVIYAGVRGYLDKLEPSKITKFENAFLSHVVSQHQALLGTIRADG KISEQSDAKLKEIVTNFLAGFEA
Research Area	Tags & Cell Markers
Source	Yeast
Gene Names	ATP5F1A
Protein Names	Recommended name: ATP synthase subunit alpha, mitochondrial



Expression Region	44-553aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	57.2kDa
Protein Description	Full Length of Mature Protein

Image


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