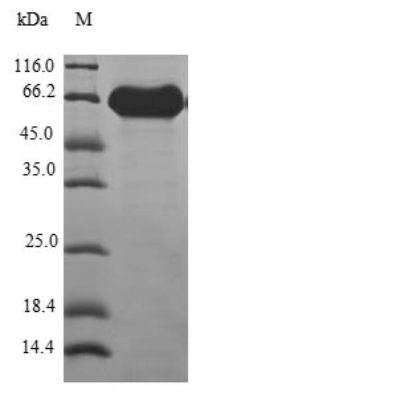
Recombinant Human V-type proton ATPase subunit d 1 (ATP6V0D1)

Product Code	CSB-EP002390HU
Relevance	Subunit of the integral membrane V0 complex of vacuolar ATPase. Vacuolar ATPase is responsible for acidifying a variety of intracellular compartments in eukaryotic cells, thus providing most of the energy required for transport processes in the vacuolar system. May play a role in coupling of proton transport and ATP hydrolysis. May play a role in cilium biogenesis through regulation of the transport and the localization of proteins to the cilium
Abbreviation	Recombinant Human ATP6V0D1 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.	P61421
Alias	32 kDa accessory protein V-ATPase 40 kDa accessory protein V-ATPase AC39 subunit
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MSFFPELYFNVDNGYLEGLVRGLKAGVLSQADYLNLVQCETLEDLKLHLQSTD YGNFLANEASPLTVSVIDDRLKEKMVVEFRHMRNHAYEPLASFLDFITYSYMID NVILLITGTLHQRSIAELVPKCHPLGSFEQMEAVNIAQTPAELYNAILVDTPLAAF FQDCISEQDLDEMNIEIIRNTLYKAYLESFYKFCTLLGGTTADAMCPILEFEADR RAFIITINSFGTELSKEDRAKLFPHCGRLYPEGLAQLARADDYEQVKNVADYYP EYKLLFEGAGSNPGDKTLEDRFFEHEVKLNKLAFLNQFHFGVFYAFVKLKEQE CRNIVWIAECIAQRHRAKIDNYIPIF
Research Area	Signal Transduction
Source	E.coli
Target Names	ATP6V0D1
Protein Names	Recommended name: V-type proton ATPase subunit d 1 Short name= V-ATPase subunit d 1 Alternative name(s): 32 kDa accessory protein V-ATPase 40 kDa accessory protein V-ATPase AC39 subunit Short name= p39 Vacuolar proton pum
Expression Region	1-351aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal GST-tagged

Mol. Weight	67.3kDa
Protein Length	Full Length

Image



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

Description

The region for expressing recombinant Human ATP6V0D1 contains amino acids 1-351. The theoretical molecular weight of the ATP6V0D1 protein is 67.3 kDa. This ATP6V0D1 recombinant protein is manufactured in e.coli. The N-terminal GST tag was fused into the coding gene segment of ATP6V0D1, making it easier to detect and purify the ATP6V0D1 recombinant protein in the later stages of expression and purification.

Researchers are actively exploring the functions of V-type proton ATPase subunit d 1 (ATP6V0D1). This protein is involved in the formation of the intracellular V-type ATPase complex, crucial for regulating the cellular pH balance. In cancer research, scientists have found a connection between ATP6V0D1 and tumor growth and invasion, suggesting it as a potential target for anti-cancer treatments. Additionally, in the field of neuroscience, ATP6V0D1 is closely associated with synaptic transmission in neurons and membrane transport processes, playing a significant role in the normal functioning of the nervous system. Recent studies have also identified its regulatory role in immune cells, providing a new perspective for research in immunology and autoimmune 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

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.