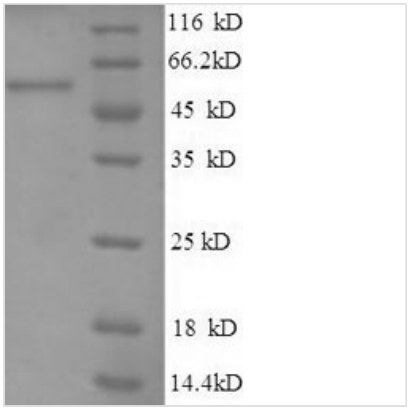
Recombinant Human Heat shock protein 75 kDa, mitochondrial (TRAP1), partial

Product Code	CSB-EP618639HU1
Relevance	Chaperone that expresses an ATPase activity. Involved in maintaining mitochondrial function and polarization, most likely through stabilization of mitochondrial complex I. Is a negative regulator of mitochondrial respiration able to modulate the balance between oxidative phosphorylation and aerobic glycolysis. The impact of TRAP1 on mitochondrial respiration is probably mediated by modulation of mitochondrial SRC and inhibition of SDHA.
Abbreviation	Recombinant Human TRAP1 protein, partial
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.	Q12931
Alias	TNFR-associated protein 1Tumor necrosis factor type 1 receptor-associated protein ;TRAP-1
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	STQTAEDKEEPLHSIISSTESVQGSTSKHEFQAETKKLLDIVARSLYSEKEVFIR ELISNASDALEKLRHKLVSDGQALPEMEIHLQTNAEKGTITIQDTGIGMTQEELV SNLGTIARSGSKAFLDALQNQAEASSKIIGQFGVGFYSAFMVADRVEVYSRSA APGSLGYQWLSDGSGVFEIAEASGVRTGTKIIIHLKSDCKEFSSEARVRDVVTK YSNFVSFPLYLNGRRMNTLQAIWMMDPKDVRE
Research Area	Others
Source	E.coli
Target Names	TRAP1
Expression Region	60-308aa
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	54.5kDa
Protein Length	Partial
Image	



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

Description

Amino acids 60-308 form the expressed segment for recombinant Human TRAP1. The theoretical molecular weight of the TRAP1 protein is 54.5 kDa. This TRAP1 recombinant protein is manufactured in e.coli. The N-terminal GST tag was fused into the coding gene segment of TRAP1, making it easier to detect and purify the TRAP1 recombinant protein in the later stages of expression and purification.

The human heat shock protein 75 kDa, mitochondrial (TRAP1) is a molecular chaperone located in the mitochondria. TRAP1 belongs to the HSP90 family and plays a critical role in mitochondrial protein folding, stability, and cellular stress response. TRAP1 is involved in the regulation of mitochondrial functions, including energy production and apoptosis. As a chaperone, TRAP1 assists in the proper folding of mitochondrial proteins, maintaining mitochondrial homeostasis. Its role in cellular stress response makes TRAP1 a key player in protecting cells from various stressors, including oxidative stress. Research on TRAP1 explores its functions in mitochondrial biology, cellular stress adaptation, and its potential implications in diseases such as cancer, where mitochondrial dysfunction is often observed.

Shelf Life

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