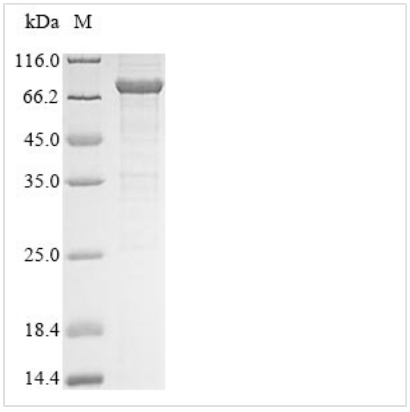
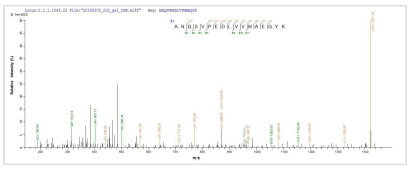
Recombinant Human Probable ATP-dependent RNA helicase DDX53 (DDX53)

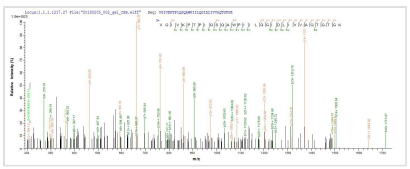
Product Code	CSB-EP773024HU
Abbreviation	Recombinant Human DDX53 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q86TM3
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	MSHWAPEWKRAEANPRDLGASWDVRGSRGSGWSGPFGHQGPRAAGSREP PLCFKIKNNMVGVVIGYSGSKIKDLQHSTNTKIQIINGESEAKVRIFGNREMKAK AKAAIETLIRKQESYNSESSVDNAASQTPIGRNLGRNDIVGEAEPLSNWDRIRA AVVECEKRKWADLPPVKKNFYIESKATSCMSEMQVINWRKENFNITCDDLKSG EKRLIPKPTCRFKDAFQQYPDLLKSIIRVGIVKPTPIQSQAWPIILQGIDLIVVAQT GTGKTLSYLMPGFIHLDSQPISREQRNGPGMLVLTPTRELALHVEAECSKYSY KGLKSICIYGGRNRNGQIEDISKGVDIIIATPGRLNDLQMNNSVNLRSITYLVIDE ADKMLDMEFEPQIRKILLDVRPDRQTVMTSATWPDTVRQLALSYLKDPMIVYV GNLNLVAVNTVKQNIIVTTEKEKRALTQEFVENMSPNDKVIMFVSQKHIADDLS SDFNIQGISAESLHGNSEQSDQERAVEDFKSGNIKILITTDIVSRGLDLNDVTHV YNYDFPRNIDVYVHRVGYIGRTGKTGTSVTLITQRDSKMAGELIKILDRANQSV PEDLVVMAEQYKLNQQKRHRETRSRKPGQRRKEFYFLS
Research Area	Cancer
Source	E.coli
Target Names	DDX53
Protein Names	Cancer-associated gene protein Cancer/testis antigen 26 Short name: CT26 DEAD box protein 53 DEAD box protein CAGE CAGE
Expression Region	1-631aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged and C-terminal Myc-tagged
Mol. Weight	76.2 kDa
Protein Length	Full Length
Image	



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



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP773024HU could indicate that this peptide derived from E.coli-expressed Homo sapiens (Human) DDX53.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP773024HU could indicate that this peptide derived from E.coli-expressed Homo sapiens (Human) DDX53.

Description

The recombinant human DDX53 protein is a fusion protein consists of the human DDX53 protein (1-631aa) partnered with the N-terminal 10xHis tag and C-terminal Myc tag. It was produced in the E.coli. This recombinant DDX53 protein's purity is greater than 85% determined by SDS-PAGE. After electrophoresis, there is a 78 kDa protein band presented on the gel.

Human Probable ATP-dependent RNA helicase DDX53 functions as an oncogene and increases the level of cyclins. Aberrant expression of DDX53 has been documented in various cancer tissues and cell lines. Helicases are implicated in most stages of the gene expression pathway, ranging from DNA replication, RNA transcription, splicing, RNA transport, ribosome biogenesis, mRNA translation, RNA storage and decay. Besides, methylation has an important role for the expression regulation of DDX53. It has been found that DDX53 confers resistance to various anti-cancer drugs. Furthermore, a study noted that DDX53 promotes cancer stem cell-like properties and autophagy. DDX53 showed a co-expression with CD133, and binding to SOX-2, a marker of cancer stemness. Threrfore, DDX53 has been regared as a novel role of DDX53 in regulating cancer stem cell-like properties. Additionally, Activation of DDX53 was observed in a variety of tumors, including gastric and endometrial cancers, as well as in hematological cancers.

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.