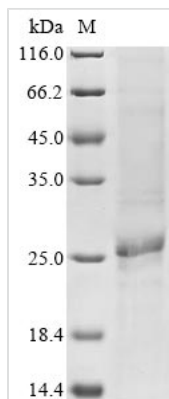




Recombinant Human E3 ubiquitin-protein ligase RNF5 (RNF5)

Product Code	CSB-CF857879HU
Abbreviation	Recombinant Human RNF5 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.	Q99942
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 85% as determined by SDS-PAGE.
Sequence	AAAEEDGGPEGPNRERGGAGATFECNICLETAREAVVSVCGHLYCWPC LH QWLETRPERQECVPCKAGISREKVVPLYGRGSQKPQDPRLKTPPRPQGQRP APESRGGFQPF GDTGGFHFSFGVGAFPF GFFTTVFNAHEPFRRGTGV DLGQ GHPASSWQDSLFLFLAIFFFFWLLSI
Research Area	Transferase
Source	in vitro E.coli expression system
Target Names	RNF5
Expression Region	2-180aa
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
Mol. Weight	25.8 kDa
Protein Length	Full Length of Mature Protein
Image	



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

Description

This recombinant HumanRNF5 protein is an in vitro E.coli (cell-free) expressed protein (Full Length of Mature Protein). Its purity is 85%+ determined by SDS-PAGE. Cell-free protein expression is the in vitro synthesis of a protein using translation-compatible extracts of whole cells. In principle, whole-cell extracts contain all the macromolecules and components needed for transcription, translation, and even post-translational modification. These components include RNA polymerase, regulatory protein factors, transcription factors, ribosomes, and tRNA. When supplemented with cofactors, nucleotides, and the specific gene template, these extracts can synthesize proteins of interest in a few hours.

RNF5 is an endoplasmic reticulum (ER)-related E3 ubiquitin ligase that constitutes the UBC6e-p97 complex, which is involved in ER-associated degradation (ERAD). RNF5 can recognize misfolded proteins and facilitate their ubiquitination and proteasomal degradation. It is involved in the inflammatory response in viral infections through the ubiquitination of transmembrane protein 173 as well as suppression of the activation of virus-induced interferon regulatory factor 3, expression of interferon beta 1, and the cellular antiviral response. RNF5 is upregulated in several cancers, including breast cancer, hepatocellular carcinoma, and acute myeloid leukemia (AML). Inhibition of RNF5 expression reduces proliferation of breast cancer cells.

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.