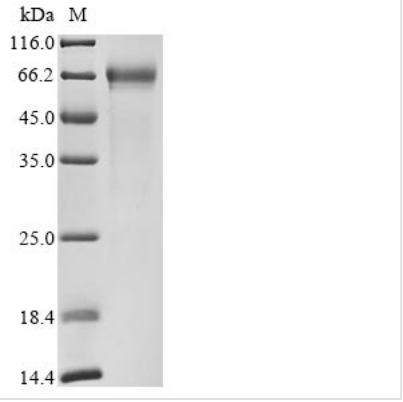
Recombinant Human Ribonuclease T2 (RNASET2)

Product Code	CSB-MP019810HU
Abbreviation	Recombinant Human RNASET2 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.	O00584
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 90% as determined by SDS-PAGE.
Sequence	DKRLRDNHEWKKLIMVQHWPETVCEKIQNDCRDPPDYWTIHGLWPDKSEGC NRSWPFNLEEIKDLLPEMRAYWPDVIHSFPNRSRFWKHEWEKHGTCAAQVD ALNSQKKYFGRSLELYRELDLNSVLLKLGIKPSINYYQVADFKDALARVYGVIPK IQCLPPSQDEEVQTIGQIELCLTKQDQQLQNCTEPGEQPSPKQEVWLANGAAE SRGLRVCEDGPVFYPPPKKTKH
Research Area	Cancer
Source	Mammalian cell
Target Names	RNASET2
Expression Region	25-256aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	C-terminal hFc1-tagged
Mol. Weight	56.1 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

The recombinant human Ribonuclease T2 (RNASET2) protein is produced by constructing the recombinant plasmid encoding the human RNASET2 protein (25-256aa) along with the C-terminal hFc-tag, transforming recombinant plasmid into mammalian cells, screening the positive mammalian cells and culturing them, and inducing the protein expression. Following expression, the recombinant RNASET2 protein is isolated and purified from the cell lysate using affinity purification. Denaturing SDS-PAGE is then employed to resolve the resulting recombinant human RNASET2 protein. Its purity is greater than 90%.

RNASET2, part of the T2 ribonuclease family, is a versatile protein with many roles in biology. Besides its traditional job of breaking down RNA, recent studies show it has other functions too [1][2]. It's important for the immune system, affecting how different immune cells work [3][4]. In cancer, RNASET2 can inhibit tumor formation like ovarian cancer or promote tumor growth [5][6]. In diseases like Crohn's disease, it seems to have a mixed effect on inflammation [7]. It also influences fat production and cell movement in kidney cancer, showing its involvement in different diseases [8].

RNASET2 is connected to various health problems, from cancer to infertility and nerve damage, showing it's vital for many body functions [9]. It helps control cell growth and can slow down the growth of tumors [10][11]. In ovarian cancer, it seems to have a role in controlling which genes are active, which affects how cancer develops [12].

References:
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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.