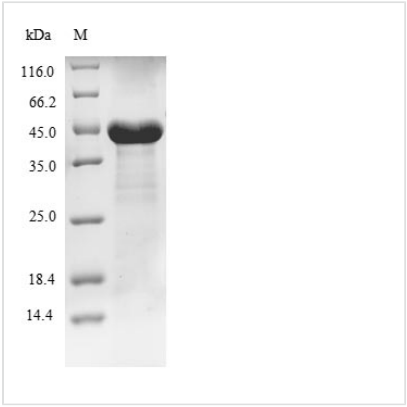
Recombinant Human Phosphoribosylformylglycinamidine synthase (PFAS), partial

Product Code	CSB-EP017811HU
Relevance	Inhibins and activins inhibit and activate, respectively, the secretion of follitropin by the pituitary gland. Inhibins/activins are involved in regulating a number of diverse functions such as hypothalamic and pituitary hormone secretion, gonadal hormone secretion, germ cell development and maturation, erythroid differentiation, insulin secretion, nerve cell survival, embryonic axial development or bone growth, depending on their subunit composition. Inhibins appear to oppose the functions of activins.
Abbreviation	Recombinant Human PFAS 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.	O15067
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	RVAILREEGSNGDREMADAFHLAGFEVWDVTMQDLCSGAIGLDTFRGVAFVG GFSYADVLGSAKGWAAAVTFHPRAGAELRRFRKRPDTFSLGVCNGCQLLALL GWVGGDPNEDAAEMGPDSQPARPGLLLRHNLSGRYESRWASVRVGPGPAL MLRGMEGAVLPVWSAHGEGYVAFSSPELQAQIEARGLAPLHWADDDGNPTE QYPLNPNGSPGGVAGICSCDGRHLAVMPHPERAV
Source	E.coli
Target Names	PFAS
Protein Names	Recommended name: Phosphoribosylformylglycinamidine synthase Short name= FGAM synthase Short name= FGAMS EC= 6.3.5.3Alternative name(s): Formylglycinamide ribotide amidotransferase Short name= FGARAT Formylglycinamide ribo
Expression Region	1064-1302aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-SUMO-tagged and C-terminal Myc-tagged
Mol. Weight	45.4 kDa
Protein Length	Partial

Image



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

Description

This Human PFAS recombinant protein was produced in E.coli, where the gene sequence encoding Human PFAS (1064-1302aa) was expressed with the N-terminal 10xHis-SUMO tag and C-terminal Myc tag. The purity of this PFAS protein was greater than 85% by SDS-PAGE.
PFAS is part of the purine biosynthesis pathway, and its specific role in this pathway is to convert multiple substrates into 5-phosphoribosylformylglycinamidine (FGAR). This reaction is a critical step in purine synthesis. Purines are essential components of DNA and RNA and serve as precursors to important energy molecules like ATP and GTP within cells. PFAS's involvement in purine synthesis ensures that cells can manufacture an adequate supply of purines to support their survival and growth. The activity of PFAS is regulated by various factors, including substrate concentrations, feedback inhibition, and the actions of regulatory proteins. This precise regulation helps maintain the balance of the purine biosynthesis pathway.

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.