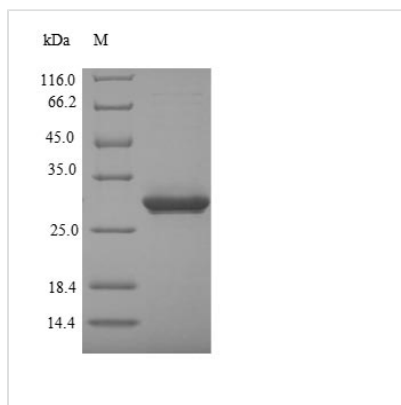




Recombinant Mouse Alpha-defensin 5 (Defa5)

Product Code	CSB-EP006657MO
Relevance	Probably contributes to the antimicrobial barrier function of the small bowel mucosa.
Abbreviation	Recombinant Mouse Defa5 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.	P28312
Alias	Defensin-related cryptdin-5
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	SKKLICYCRIRGCKRRERVFGTCRNLFVTFVCCS
Research Area	Others
Source	E.coli
Target Names	Defa5
Expression Region	59-93aa
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	31.2kDa
Protein Length	Full Length of Mature Protein

Image



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

Description

Recombinant Mouse Defa5 is an E.coli cell-expressed protein (Full Length of



Mature Protein). E.coli expression systems are popular because bacteria are easy to culture, grow fast and produce high yields of recombinant protein. Traditional strategies for Mouse Defa5 recombinant protein expression involve transforming the recombinant plasmid into the E. coli host. The cells were directly replicated, transcribed and translated, and IPTG was added to express the desired protein. Typically, the cells are then lysed to extract the expressed protein for subsequent purification. Also, many proteins become insoluble as inclusion bodies that are very difficult to recover, so mild conditions and subsequent cumbersome protein-refolding procedures are used to ensure the final provided protein is soluble.

Defa5 is a gene encoding a protein named alpha-defensin 5 which belongs to alpha-defensin family (also referred to a family of microbicidal and cytotoxic peptides). The members of the defensin family are highly similar in protein sequence and distinguished by a conserved cysteine motif, which are involved in host defense, and help to maintain homeostasis of intestinal microbiota. Emerging evidence has reported that human alpha defensin 5 is highly expressed in secretory granules of crypt Paneth cells (PCs) of the small intestine (ileum) and is a candidate biomarker to delineate inflammatory bowel disease.

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.