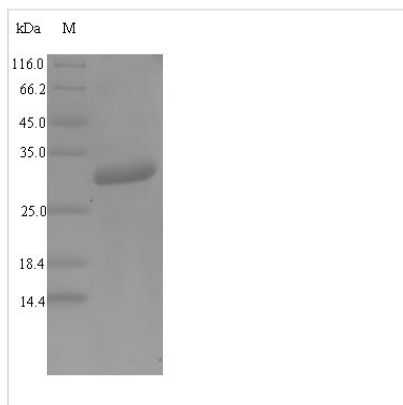




# Recombinant Mouse Alpha-defensin 1 (Defa1)

<b>Product Code</b>	CSB-YP006652MO
<b>Relevance</b>	Probably contributes to the antimicrobial barrier function of the small bowel mucosa. Has antibacterial activity against attenuated mutants of <i>S.typhimurium</i> .
<b>Abbreviation</b>	Recombinant Mouse Defa1 protein
<b>Storage</b>	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.
<b>Uniprot No.</b>	P11477
<b>Alias</b>	Cryptdin-1 Defensin-related cryptdin peptide
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Mus musculus (Mouse)
<b>Purity</b>	Greater than 90% as determined by SDS-PAGE.
<b>Sequence</b>	LRDLVCYCRSRGCKGRERMNGTCRKGHLLYTLCCR
<b>Research Area</b>	Immunology
<b>Source</b>	Yeast
<b>Target Names</b>	Defa1
<b>Protein Names</b>	Recommended name: Alpha-defensin 1 Alternative name(s): Cryptdin-1 Defensin-related cryptdin peptide
<b>Expression Region</b>	59-93aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	N-terminal GST-tagged
<b>Mol. Weight</b>	31.1kDa
<b>Protein Length</b>	Full Length of Mature Protein

## Image



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



## Description

The production of this Recombinant Mouse Defa1 protein required the insertion of a DNA fragment (Defa1, 59-93aa) into a plasmid vector and the transferral of this vector into Yeast cells (the step of transformation). The cells were then cultured and induced to express the Defa1 protein. This recombinant protein was fused with N-terminal GST tag. Its purity is 90%+ determined by SDS-PAGE.

Defa1 (also called Defcr or Defcr1) is a gene providing an instruction of making a protein named alpha-defensin 1 (Defa1) in mus musculus (mouse). Defa1 protein is also known as cryptdin-1 or defensin-related cryptdin peptide and belongs to alpha-defensin ( $\alpha$ -defensin) family. Mammalian  $\alpha$ -defensins are cationic antimicrobial peptides (AMPs) with microbicidal activities against many species of bacteria (such as gram-negative and gram-positive bacterium) and fungi, antiviral functions, and diverse immunomodulatory effects (such as innate immune response in mucosa).

## 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.