

Product datasheet

Recombinant Rat IL-33 protein ab207126

1 Image

Description

Product name	Recombinant Rat IL-33 protein
Purity	> 90 % SDS-PAGE. ab207126 was purified using conventional chromatography.
Expression system	Escherichia coli
Accession	<u>Q66H70</u>
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Rat
Sequence	MGSSHHHHHH SSGLVPRGSH MGSSIQGTSL LTESCALSTYNDQSVSFVLE NGCYVINVED CGKNQEKDKV LLRYESSFP AQSGDGVDGK KLMVNMSPK DTDIWLNAND KDYSVELQKG DVSPPDQAFF VLHKKSSDFV SFECKNLPGT YIGVKDNQLA LVEENDESCN NIMFKLSKM
Predicted molecular weight	20 kDa including tags
Amino acids	109 to 264
Tags	His tag N-Terminus
Additional sequence information	NP_001014188

Specifications

Our **Abpromise guarantee** covers the use of **ab207126** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Mass Spectrometry SDS-PAGE
Mass spectrometry	MALDI-TOF
Form	Liquid

Preparation and Storage

Stability and Storage

Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 7.40

Constituents: 10% Glycerol (glycerin, glycerine), 89% PBS

General Info

Function

Cytokine that binds to and signals through the IL1RL1/ST2 receptor which in turn activates NF-kappa-B and MAPK signaling pathways in target cells (PubMed:16286016). Involved in the maturation of Th2 cells inducing the secretion of T-helper type 2-associated cytokines. Also involved in activation of mast cells, basophils, eosinophils and natural killer cells. Acts as a chemoattractant for Th2 cells, and may function as an "alarmin", that amplifies immune responses during tissue injury (PubMed:17853410, PubMed:18836528).

In quiescent endothelia the uncleaved form is constitutively and abundantly expressed, and acts as a chromatin-associated nuclear factor with transcriptional repressor properties, it may sequester nuclear NF-kappaB/RELA, lowering expression of its targets (PubMed:21734074). This form is rapidly lost upon angiogenic or proinflammatory activation (PubMed:18787100).

Tissue specificity

Expressed at high level in high endothelial venules found in tonsils, Peyer patches and mesenteric lymph nodes. Almost undetectable in placenta.

Sequence similarities

Belongs to the IL-1 family. Highly divergent.

Domain

The homeodomain-like HTH domain mediates nuclear localization and heterochromatin association.

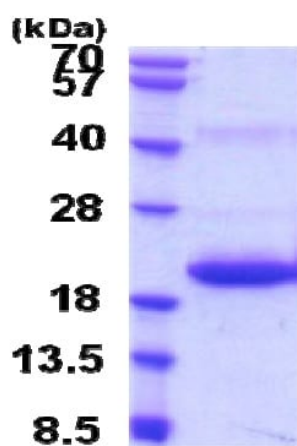
Post-translational modifications

The full length protein can be released from cells and is able to signal via the IL1RL1/ST2 receptor. However, proteolytic processing by CSTG/cathepsin G and ELANE/neutrophil elastase produces C-terminal peptides that are more active than the unprocessed full length protein. May also be proteolytically processed by calpains (PubMed:19596270). Proteolytic cleavage mediated by apoptotic caspases including CASP3 and CASP7 results in IL33 inactivation (PubMed:19559631). In vitro proteolytic cleavage by CASP1 was reported (PubMed:16286016) but could not be confirmed in vivo (PubMed:19465481) suggesting that IL33 is probably not a direct substrate for that caspase.

Cellular localization

Nucleus. Chromosome. Cytoplasmic vesicle, secretory vesicle. Secreted. Associates with heterochromatin and mitotic chromosomes (PubMed:17185418).

Images



15% SDS-PAGE analysis of ab207126 (3 µg)

SDS-PAGE - Recombinant Rat IL-33 protein
(ab207126)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors