

Product datasheet

Recombinant human CD13 protein ab134454

1 Image

Description

<b>Product name</b>	Recombinant human CD13 protein
<b>Biological activity</b>	The active enzyme is inhibited by Amastatin hydrochloride, Actinonin and Bestatin hydrochloride (approx 150 µM). Specific activity of ab134454 is >500 mU/mg (L-Leu-pNA at 37°C, pH 7.2)
<b>Purity</b>	> 90 % SDS-PAGE.
<b>Expression system</b>	Native
<b>Accession</b>	<a href="#">P15144</a>
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Human
<b>Sequence</b>	

MAKGFYISKSLGILGILLGVAAVCTIIALSVVYSQEKNKNANS  
 SPVASTT  
 PSASATTNPASATTLTQSKAWNRYRLPNTLKPDSYRVTLR  
 PYLTPNDRGL  
 YVFKGSSTVRFTCKEATDVIIHSKKNLNYLSQGHRVVLRGV  
 GGSQPPDI  
 DKTELVEPTEYLVVHLKGSVKDSQYEMDSEFEGELADD  
 LAGFYRSEYME  
 GNVRKVVATTQMQAADARKSFPCFDEPAMKAEFNITLIHP  
 KDLTALSN  
 MLPKGPSTPLPEDPNWNVTEFHHTPKMSTYLLAFIVSEFD  
 YVEKQASNGV  
 LIRWARPSAIAAGHGDYALNVTGPILNFFAGHYDTPYPLPK  
 SDQIGLPD  
 FNAGAMENWGLVITYRENSLLFDPLSSSSSNKERVVTVIAH  
 ELAHQWFGNL  
 VTIEWWNDLWLNIEGFASYVEYLGADYAEPTWNLKDLMLV  
 NDVYRVMVDA  
 LASSHPLSTPASEINTPAQISELFDASYSKGASVLRMLSSF  
 LSEDFVKQ  
 GLASYLHTFAYQNTYLNLDHDLQEAVERNRSIQLPTTVRDIM  
 NRWTLQMG  
 FPVITVDTSTGTLSQEHLDPDSNVTRPSEFNYYVWVPITS

IRDGRQQQ  
DYWLIDVRAQNDFSTSGNEWVLLNLNVTGYRVNYDEEN  
WRKIQTQLQR DHSAIPVINRAQ  
IINDAFNLASAHKVPVTLALNNTLFLIEERQYMPWE  
AALSSLSYFKLMFDRSEVYGPMKN  
YLKKQVTPLFIHFRNNTNWNREIP  
ENLMDQYSEVNAISTACSNVPECEEMVSGLFKQWM  
ENPNNPIHPNL  
RSTVYCNAIAQGEEWDFAWEQFRNATLVNEADKLRAA  
LACSKELWI  
LNRYSYTLNPD LIRKQDATSTIISITNNVIGQGLVWDFVQSN  
WKKLFND YGGGSFSFSN  
LIQAVTRRFSTEYELQQLEQFKKDNEETGFGSGTRALE  
QALEKTKANIKWVKENKEVVLQ WFTENSK

<b>Predicted molecular weight</b>	110 kDa
<b>Amino acids</b>	1 to 967
<b>Additional sequence information</b>	Purified from human serum

## Specifications

---

Our [Abpromise guarantee](#) covers the use of **ab134454** in the following tested applications.

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

<b>Applications</b>	Functional Studies SDS-PAGE
<b>Form</b>	Liquid
<b>Additional notes</b>	ab134454 is certified to be negative for HBsAg and for antibodies to HIV and HCV.

## Preparation and Storage

---

<b>Stability and Storage</b>	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 7.40 Constituents: 0.01% Calcium chloride, 0.32% Tris HCl, 2.92% Sodium chloride This product is an active protein and may elicit a biological response in vivo, handle with caution.
------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## General Info

---

<b>Function</b>	Broad specificity aminopeptidase. Plays a role in the final digestion of peptides generated from hydrolysis of proteins by gastric and pancreatic proteases. May play a critical role in the pathogenesis of cholesterol gallstone disease. May be involved in the metabolism of regulatory peptides of diverse cell types including small intestinal and tubular epithelial cells, macrophages, granulocytes and synaptic membranes from the CNS. Found to cleave antigen peptides bound to major histocompatibility complex class II molecules of presenting cells and to degrade neurotransmitters at synaptic junctions. Is also implicated as a regulator of IL-8 bioavailability in the endometrium, and therefore may contribute to the regulation of angiogenesis. Is used as a marker for acute myeloid leukemia and plays a role in tumor invasion. In case of human coronavirus 229E (HCoV-229E) infection, serves as receptor for HCoV-229E spike glycoprotein.
-----------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Mediates as well human cytomegalovirus (HCMV) infection.

### Tissue specificity

Expressed in epithelial cells of the kidney, intestine, and respiratory tract; granulocytes, monocytes, fibroblasts, endothelial cells, cerebral pericytes at the blood-brain barrier, synaptic membranes of cells in the CNS. Also expressed in endometrial stromal cells, but not in the endometrial glandular cells. Found in the vasculature of tissues that undergo angiogenesis and in malignant gliomas and lymph node metastases from multiple tumor types but not in blood vessels of normal tissues. A soluble form has been found in plasma. It is found to be elevated in plasma and effusions of cancer patients.

### Sequence similarities

Belongs to the peptidase M1 family.

### Domain

Amino acids 260-353 are essential to mediate susceptibility to infection with HCoV-229E (in porcine/human chimeric studies) and more specifically amino acids 288-295 (mutagenesis studies).

### Post-translational modifications

Sulfated.

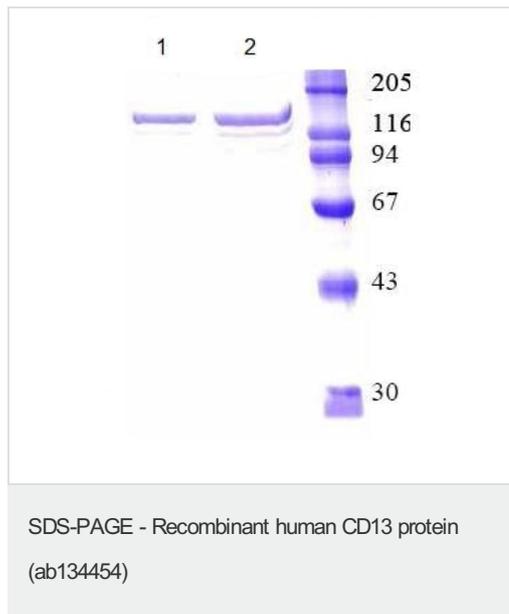
N- and O-glycosylated.

May undergo proteolysis and give rise to a soluble form.

### Cellular localization

Cell membrane. Cytoplasm > cytosol. A soluble form has also been detected.

## Images



SDS-PAGE analysis of ab134454 at 0.5µg (lane 1) and 1.0 µg (lane 2).

**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