# abcam

## Product datasheet

## Recombinant Human ADAMTS4 protein ab132081

\* ★ ★ ★ ★ 1 Abreviews 1 Image

**Description** 

Product name Recombinant Human ADAMTS4 protein

Expression system Wheat germ
Accession O75173

Protein length Protein fragment

Animal free No

**Nature** Recombinant

**Species** Human

Sequence MSQTGSHPGRGLAGRWLWGAQPCLLLPIVPLSWLVWLLL

**LLLASLLPSAR** 

LASPLPREEENFPEKLNGSVLPGSGAPARLLCRLQAFGE

**TLLLELEQDS** 

GVQVEGLTVQYLGQAPELLGGAEPGTYLTGTINGDPESVA

SLHWDGGALL

GVLQYRGAELHLQPLEGGTPNSAGGPGAHILRRKSPASG

**QGPMCNVKAPL** 

GSPSPRPRRAKRFASLSRFVETLVVADDKMAAFHGAGLK

**RYLLTVMAAAA** 

KAFKHPSIRNPVSLVVTRLVILGSGEEGPQVGPSAAQTLR

SFCAWQRGLN

TPEDSDPDHFDTAILFTRQVRPQSAPQAMHCTILRSATT

Predicted molecular weight 62 kDa including tags

Amino acids 1 to 339

Tags GST tag N-Terminus

**Specifications** 

Our Abpromise guarantee covers the use of ab132081 in the following tested applications.

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

**Applications** SDS-PAGE

Western blot

**ELISA** 

1

#### **Preparation and Storage**

Stability and Storage Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

00.8 :Ha

Constituents: 0.31% Glutathione, 0.79% Tris HCI

#### **General Info**

**Function** Cleaves aggrecan, a cartilage proteoglycan, and may be involved in its turnover. May play an

important role in the destruction of aggrecan in arthritic diseases. Could also be a critical factor in the exacerbation of neurodegeneration in Alzheimer disease. Cleaves aggrecan at the '392-Glu-

-Ala-393' site.

**Tissue specificity** Expressed in brain, lung and heart. Expressed at very low level in placenta and skeletal muscles.

**Sequence similarities** Contains 1 disintegrin domain.

Contains 1 peptidase M12B domain. Contains 1 TSP type-1 domain.

**Domain** The spacer domain and the TSP type-1 domains are important for a tight interaction with the

extracellular matrix.

The conserved cysteine present in the cysteine-switch motif binds the catalytic zinc ion, thus inhibiting the enzyme. The dissociation of the cysteine from the zinc ion upon the activation-

peptide release activates the enzyme.

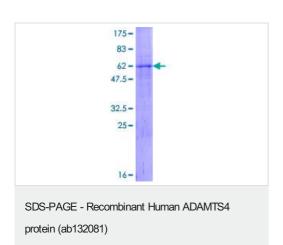
Post-translational

modifications

The precursor is cleaved by a furin endopeptidase.

**Cellular localization** Secreted > extracellular space > extracellular matrix.

### **Images**



12.5% SDS-PAGE analysis of ab132081 stained with Coomassie Blue.

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 <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

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