

Recombinant Human PADI4 / PAD4 protein - BSA and Azide free ab173032

Description

Product name	Recombinant Human PADI4 / PAD4 protein - BSA and Azide free
Purity	> 95 % SDS-PAGE. Greater than 95% as determined by SEC-HPLC and reducing SDS-PAGE.
Endotoxin level	< 1.000 Eu/μg
Expression system	Escherichia coli
Accession	<u>Q9UM07</u>
Protein length	Full length protein
Animal free	No
Carrier free	Yes
Nature	Recombinant
Species	Human

Sequence

MAQGTLRVTPEQPTHAVCVLGLTLQLDICSSAPEDCTSF
SINASPGVVV
DIAHGPPAKKKSTGSSWPLDPGVEVTLTMKVASGSTGD
QKVQISYYGPK
TPPVKALLYLTGVEISLCADITRTGKVKPTRAVKDQRTWTW
GPCGQGAIL
LVNCDRDNLESSAMDCEDEVLDSEDLQDMSLMTLSTK
TPKDFFTNHTLV
LHVARSEMDKVRVFQATRGLSSKCSVVLGPKWPSHYL
MVPGGKHNMDFY
VEALAFPDTDFPGLITLTISLLDTSNLELPEAVVFQDSVVF
RVAPWIMTP
NTQPPQEVYACSFENEDFLKSVTTLAMKAKCKLTICPEEE
NMDDQWMQD
EMEIGYIQAPHKTLPVVFDSPRNRGLKEFPIKRVMGPDFGY
VTRGPQTGG
ISGLDSFGNLEVSPVTVRGKEYPLGRILFGDSCYPSNDS
RQMHQALQDF
LSAQQVQAPVKLYSDWLSVGHVDEFLSFVPAPDRKGFR
LLASPRSCYKL
FQEQQNEGHGEALLFEGIKKKKQKIKNILSNKTLREHNSF
VERCIDWNR

ELLKRELGLAESDIIIDIPQLFKLKEFSKAEAFFPNMVMNLV
LGKHLGIPK
PFGPVINGRCCLEEKVCSLLEPLGLQCTFINDFFTYHIRHG
EVHCGTNVR RKPFSFKWWNMVP

Predicted molecular weight	76 kDa
Amino acids	1 to 663
Tags	His tag N-Terminus
Description	Recombinant Human PADI4 / PAD4 protein (BSA and azide free)

Specifications

Our **Abpromise guarantee** covers the use of **ab173032** 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 HPLC
Form	Liquid

Preparation and Storage

Stability and Storage	Shipped on Dry Ice. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. pH: 7.50 Constituents: 0.605% Tris, 2.92% Sodium chloride Supplied as a 0.2 µm Ø filtered solution.
------------------------------	---

General Info

Function	Catalyzes the citrullination/deimination of arginine residues of proteins. Citrullinates histone H3 at 'Arg-8' and/or 'Arg-17' and histone H4 at 'Arg-3', which prevents their methylation by CARM1 and HRMT1L2/PRMT1 and represses transcription. Citrullinates EP300/P300 at 'Arg-2142', which favors its interaction with NCOA2/GRIP1.
Tissue specificity	Expressed in eosinophils and neutrophils, not expressed in peripheral monocytes or lymphocytes.
Involvement in disease	Genetic variations in PADI4 are a cause of susceptibility to rheumatoid arthritis (RA) [MIM:180300]. It is a systemic inflammatory disease with autoimmune features and a complex genetic component. It primarily affects the joints and is characterized by inflammatory changes in the synovial membranes and articular structures, widespread fibrinoid degeneration of the collagen fibers in mesenchymal tissues, and by atrophy and rarefaction of bony structures. Note=Could have an important role in the pathogenesis of rheumatoid arthritis by increasing citrullination of proteins in rheumatoid arthritis synovial tissues, leading, in a cytokine-rich milieu, to a break in tolerance to citrullinated peptides processed and presented in the appropriate HLA context.
Sequence similarities	Belongs to the protein arginine deiminase family.
Cellular localization	Cytoplasm. Nucleus. Cytoplasmic granule. Cytoplasmic granules of eosinophils and neutrophils.

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