

Product datasheet

Anti-PADI4 / PAD4 antibody [OTI4H5] ab128086

★★★★★ [1 Abreviews](#) [31 References](#) [13 Images](#)

Overview

Product name	Anti-PADI4 / PAD4 antibody [OTI4H5]
Description	Mouse monoclonal [OTI4H5] to PADI4 / PAD4
Host species	Mouse
Tested applications	Suitable for: WB, IHC-P, ICC/IF, Flow Cyt (Intra)
Species reactivity	Reacts with: Human, African green monkey
Immunogen	Recombinant full length protein, corresponding to amino acids 1-663 of Human PADI4/ PAD4 produced in HEK293T cells (NP_036519).
Positive control	HEK293T cells transfected with PADI4 / PAD4 , Human breast, Carcinoma of Human lung, Adenocarcinoma of Human ovary, Human pancreas, Adenocarcinoma of Human endometrium, Human prostate, Carcinoma of Human prostate, Carcinoma of Human bladder and Human lymphoma tissues, COS7 cells transiently transfected by pCMV6-ENTRY PADI4 / PAD4 , Hela and Jurkat cells
General notes	<p>The clone number has been updated from 4H5 to OTI4H5, both clone numbers name the same antibody clone.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer	<p>pH: 7.30</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituents: 48% PBS, 1% BSA, 50% Glycerol</p>
Purity	Protein A purified
Purification notes	Purified from TCS

Clonality	Monoclonal
Clone number	OT4H5
Isotype	IgG2a

Applications

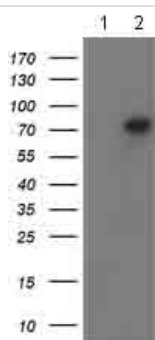
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab128086 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/2000. Predicted molecular weight: 74 kDa.
IHC-P	★★★★★ (1)	1/150.
ICC/IF		1/100.
Flow Cyt (Intra)		1/100. ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

Target

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.

Images



Western blot - Anti-PAD4 / PAD4 antibody [OT14H5] (ab128086)

All lanes : Anti-PAD4 / PAD4 antibody [OT14H5] (ab128086) at 1/2000 dilution

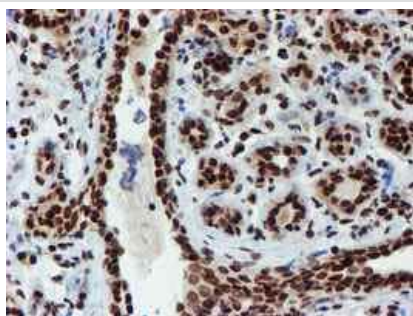
Lane 1 : HEK293T cells transfected with pCMV6-ENTRY control cDNA

Lane 2 : HEK293T cells transfected with pCMV6-ENTRY PAD4 / PAD4 cDNA

Lysates/proteins at 5 µg per lane.

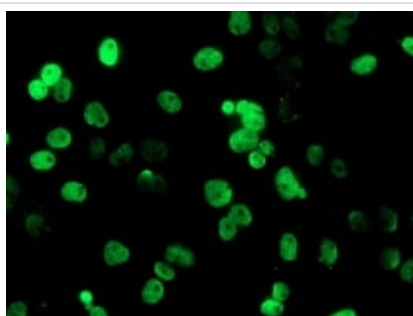
Predicted band size: 74 kDa

HEK293T cell lysates were generated from transient transfection of the cDNA clone (RC206501)



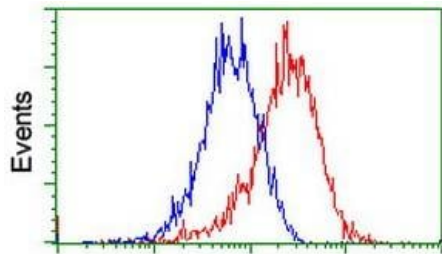
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PAD4 / PAD4 antibody [OT14H5] (ab128086)

ab128086, at a dilution of 1/150, staining PAD4 / PAD4 in paraffin-embedded Human breast tissue by Immunohistochemistry.



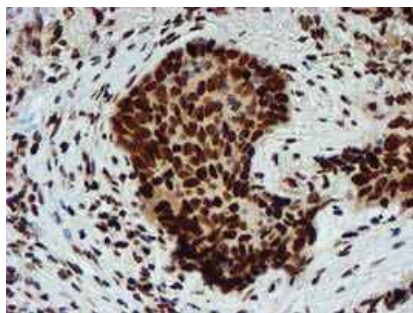
Immunocytochemistry/ Immunofluorescence - Anti-PAD4 / PAD4 antibody [OT14H5] (ab128086)

ab128086, at a dilution of 1/100, staining COS7 cells transiently transfected by pCMV6-ENTRY PAD4 / PAD4 by Immunofluorescence.



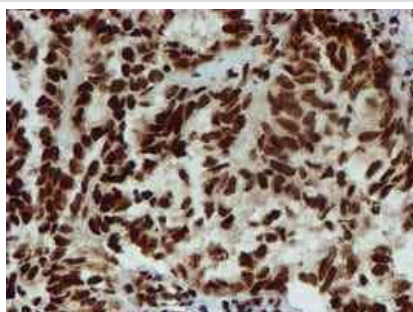
Flow Cytometry (Intracellular) - Anti-PAD4 / PAD4 antibody [OT14H5] (ab128086)

ab128086, at a dilution of 1/100, staining PAD4 / PAD4 in HeLa cells (Red), compared to a nonspecific negative control antibody (Blue), analysed by Flow cytometry (Intracellular).



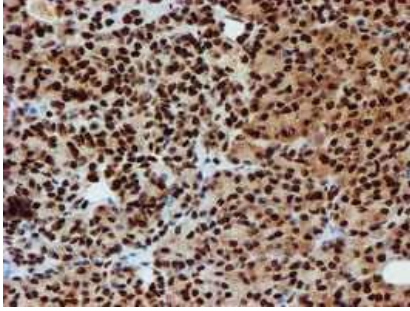
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PAD4 / PAD4 antibody [OT14H5] (ab128086)

ab128086, at a dilution of 1/150, staining PAD4 / PAD4 in paraffin-embedded carcinoma of Human lung tissue by Immunohistochemistry.



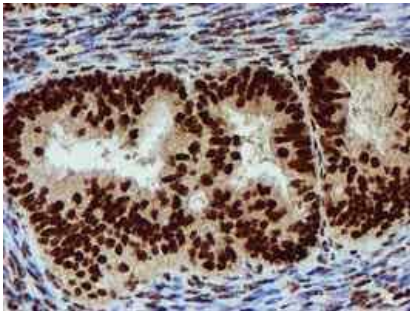
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PAD4 / PAD4 antibody [OT14H5] (ab128086)

ab128086, at a dilution of 1/150, staining PAD4 / PAD4 in paraffin-embedded Adenocarcinoma of Human ovary tissue by Immunohistochemistry.



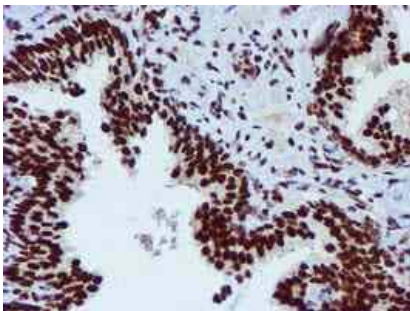
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PAD4 / PAD4 antibody [OT14H5] (ab128086)

ab128086, at a dilution of 1/150, staining PAD4 / PAD4 in paraffin-embedded Human pancreas tissue by Immunohistochemistry.



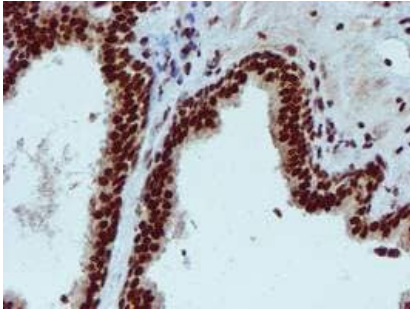
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PAD4 / PAD4 antibody [OT14H5] (ab128086)

ab128086, at a dilution of 1/150, staining PAD4 / PAD4 in paraffin-embedded Adenocarcinoma of Human endometrium tissue by Immunohistochemistry.



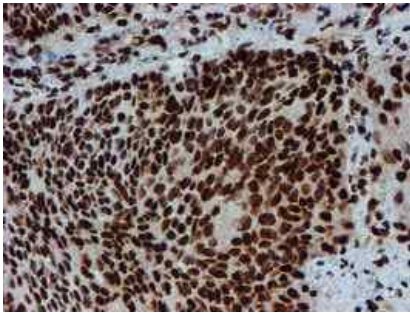
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PAD4 / PAD4 antibody [OT14H5] (ab128086)

ab128086, at a dilution of 1/150, staining PAD4 / PAD4 in paraffin-embedded Human prostate tissue by Immunohistochemistry.



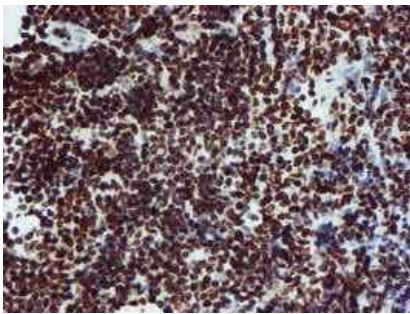
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PAD4 / PAD4 antibody [OT14H5] (ab128086)

ab128086, at a dilution of 1/150, staining PAD4 / PAD4 in paraffin-embedded Carcinoma of Human prostate tissue by Immunohistochemistry.



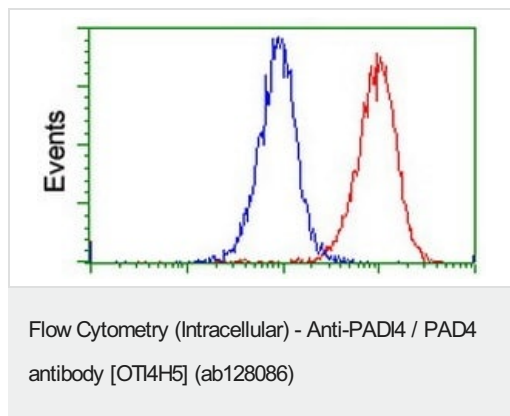
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PAD4 / PAD4 antibody [OT14H5] (ab128086)

ab128086, at a dilution of 1/150, staining PAD4 / PAD4 in paraffin-embedded Carcinoma of Human bladder tissue by Immunohistochemistry.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PAD4 / PAD4 antibody [OT14H5] (ab128086)

ab128086, at a dilution of 1/150, staining PAD4 / PAD4 in paraffin-embedded Human lymphoma tissue by Immunohistochemistry.



ab128086, at a dilution of 1/100, staining PAD14 / PAD4 in Jurkat cells (Red), compared to a nonspecific negative control antibody (Blue), analysed by Flow cytometry (Intracellular).

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