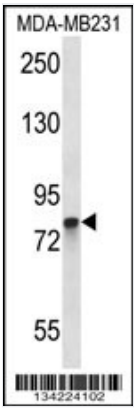
PADI2 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	PADI2, Polyclonal Antibody
Full Product Name	PADI2 Antibody (C-term)
Product Gene Name	anti-PADI2 antibody
Product Synonym Names	Protein-arginine deiminase type-2; PAD-H19; Peptidylarginine deiminase II; Protein-arginine deiminase type II; PADI2; KIAA0994; PDI2
Clonality	Polyclonal
Isotype	Rabbit Ig
Host	Rabbit
Species Reactivity	Human
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Purity/Purification	Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)
Concentration	Vial Concentration: 0.5 (lot specific)
Specificity	This PADI2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 557-586 amino acids from the C-terminal region of human PADI2.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.
Antibody/Peptide Pairs	PADI2 peptide (MBS9220720) is used for blocking the activity of PADI2 antibody (MBS9215164)
Molecular Weight	75564
Immunogen Sequence Positions	557-586
OMIM	607935
3D Structure	ModBase 3D Structure for Q9Y2J8
Antigen Type	Synthetic Peptide
Antigen Source	HUMAN
Product Categories/Family for anti-PADI2 antibody	Metabolism; Neuroscience; Signal Transduction
Applications Tested/Suitable for anti-PADI2 antibody	Western Blot (WB), ELISA (EIA)
Application Notes for anti-PADI2 antibody	WB~~1:1000

Related Product Information for anti-PADI2 antibody	This gene encodes a member of the peptidyl arginine deiminase family of enzymes, which catalyze the post-translational deimination of proteins by converting arginine residues into citrullines in the presence of calcium ions. The family members have distinct substrate specificities and tissue-specific expression patterns. The type II enzyme is the most widely expressed family member. Known substrates for this enzyme include myelin basic protein in the central nervous system and vimentin in skeletal muscle and macrophages. This enzyme is thought to play a role in the onset and progression of neurodegenerative human disorders, including Alzheimer disease and multiple sclerosis, and it has also been implicated in glaucoma pathogenesis. This gene exists in a cluster with four other paralogous genes. [provided by RefSeq].
Product References and Citations for anti-PADI2 antibody	Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) : Jang, B., et al. Acta Neuropathol. 119(2):199-210(2010) Cafaro, T.A., et al. Mol. Vis. 16, 1654-1658 (2010) : Hojo-Nakashima, I., et al. J. Biochem. 146(4):471-479(2009) Watanabe, Y., et al. J. Hum. Genet. 54(7):430-432(2009)
Other Notes	Small volumes of anti-PADI2 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for PADI2 purchase	MBS9215164 is an antibody targeting PADI2. Also known as PADI2 Antibody (C-term). Reactive in Human. Host: Rabbit.



Western Blot (WB) of anti-PADI2 antibody
PADI2 Antibody (C-term) western blot analysis in MDA-MB231 cell line lysates (35ug/lane).This demonstrates the PADI2 antibody detected the PADI2 protein (arrow).

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for PADI2. It may not necessarily be applicable to this product.

NCBI GI #	122939159
NCBI GeneID	11240
NCBI Accession #	NP_031391.2
UniProt Primary Accession #	Q9Y2J8
UniProt Secondary Accession #	Q96DA7; Q9UPN2
UniProt Related Accession #	Q9Y2J8
GenBank Nucleotide #	NM_007365.2
NCBI Official Full Name	protein-arginine deiminase type-2

NCBI Official Synonym Full Names	peptidyl arginine deiminase, type II
NCBI Official Symbol	PADI2
NCBI Official Synonym Symbols	PAD2; PDI2; PAD-H19
UniProt Protein Name	Protein-arginine deiminase type-2
UniProt Synonym Protein Names	PAD-H19; Peptidylarginine deiminase II; Protein-arginine deiminase type II
Protein Family	Protein-arginine deiminase
UniProt Gene Name	PADI2
UniProt Synonym Gene Names	KIAA0994; PDI2
UniProt Entry Name	PADI2_HUMAN
NCBI Protein Information	protein-arginine deiminase type-2
NCBI Summary for PADI2	This gene encodes a member of the peptidyl arginine deiminase family of enzymes, which catalyze the post-translational deimination of proteins by converting arginine residues into citrullines in the presence of calcium ions. The family members have distinct substrate specificities and tissue-specific expression patterns. The type II enzyme is the most widely expressed family member. Known substrates for this enzyme include myelin basic protein in the central nervous system and vimentin in skeletal muscle and macrophages. This enzyme is thought to play a role in the onset and progression of neurodegenerative human disorders, including Alzheimer disease and multiple sclerosis, and it has also been implicated in glaucoma pathogenesis. This gene exists in a cluster with four other paralogous genes. [provided by RefSeq, Jul 2008]
UniProt Comments for PADI2	PADI2: Catalyzes the deimination of arginine residues of proteins. Belongs to the protein arginine deiminase family. Protein type: EC 3.5.3.15; Hydrolase Chromosomal Location of Human Ortholog: 1p36.13 Cellular Component: cytoplasm Molecular Function: estrogen receptor binding; calcium ion binding; protein-arginine deiminase activity Biological Process: substantia nigra development; estrogen receptor signaling pathway; chromatin-mediated maintenance of transcription; peptidyl-citrulline biosynthetic process from peptidyl-arginine
Research Articles on PADI2	**1.** PADI2 and vimentin participate in the apoptotic mechanisms of activated T lymphocytes.
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