

PADI6 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18363a

Specification

PADI6 Antibody (N-term) - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype
Antigen Region

WB,E
O6TGC4
NP_997304.3
Human, Mouse
Rabbit
Polyclonal
Rabbit IgG
196-223

PADI6 Antibody (N-term) - Additional Information

Gene ID 353238

Other Names

Protein-arginine deiminase type-6, Peptidyl arginine deiminase-like protein, Peptidylarginine deiminase VI, hPADVI, Protein-arginine deiminase type VI, PADI6

Target/Specificity

This PADI6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 196-223 amino acids from the N-terminal region of human PADI6.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

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.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PADI6 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PADI6 Antibody (N-term) - Protein Information

Name PADI6 {ECO:0000303|PubMed:15087120, ECO:0000312|HGNC:HGNC:20449}

Function Structural constituent of cytoplasmic lattices, which plays a key role in early embryonic



development (PubMed:<u>37922900</u>). Cytoplasmic lattices consist in fibrous structures found in the cytoplasm of oocytes and preimplantation embryos (PubMed:<u>37922900</u>). They are required to store maternal proteins critical for embryonic development, such as ribosomal proteins and proteins that control epigenetic reprogramming of the preimplantation embryo, and prevent their degradation or activation (PubMed:<u>37922900</u>). In contrast to other members of the family, does

not show protein-arginine deiminase activity due to its inability to bind Ca(2+) (PubMed: 38656308,

PubMed: 39286527).

Cellular Location

Cytoplasm. Cytoplasmic vesicle, secretory vesicle, Cortical granule {ECO:0000250|UniProtKB:Q8K3V4}. Nucleus {ECO:0000250|UniProtKB:Q8K3V4}. Note=Core component of cytoplasmic lattices in oocytes (PubMed:37922900). Also nuclear (By similarity) {ECO:0000250|UniProtKB:Q8K3V4, ECO:0000269|PubMed:37922900}

Tissue Location

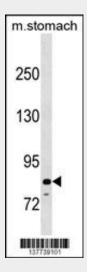
Highly expressed in oocytes and weakly expressed in other somatic tissues.

PADI6 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PADI6 Antibody (N-term) - Images



PADI6 Antibody (N-term) (Cat. #AP18363a) western blot analysis in mouse stomach tissue lysates (35ug/lane). This demonstrates the PADI6 Antibody detected the PADI6 protein (arrow).

PADI6 Antibody (N-term) - Background

Peptidylarginine deiminases (PADs, EC 3.5.3.15), including PADI6, make up a family of posttranslational protein modification





enzymes that convert arginine residues to citrulline residues in the presence of calcium ions.

PADI6 Antibody (N-term) - References

Stacey, S.N., et al. Nat. Genet. 40(11):1313-1318(2008) Chavanas, S., et al. Gene 330, 19-27 (2004) : Zhang, J., et al. Acta Biochim. Pol. 51(4):1051-1058(2004) Vossenaar, E.R., et al. Bioessays 25(11):1106-1118(2003)