

PADI2 (4D4): sc-293271

BACKGROUND

The protein arginine deiminase (PAD) family of proteins, often referred to as peptidylarginine deiminases, catalyze the deimination of arginine residues of proteins. In the presence of calcium, the proteins in the PAD family act as catalysts for the posttranslational modification reaction that converts methylarginine to citrulline. The PAD proteins are cytoplasmic proteins primarily detected in eosinophils and neutrophils. The only tissue that contains all four forms of PAD (PADI1-4) is epidermis. PADI2 may play a crucial role during terminal differentiation of epidermal keratinocytes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PADI2 (human) mapping to 1p36.13; Padi2 (mouse) mapping to 4 D3.

SOURCE

PADI2 (4D4) is a mouse monoclonal antibody raised against amino acids 1-108 of PADI2 of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

PADI2 (4D4) is recommended for detection of PADI2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PADI2 siRNA (h): sc-61281, PADI2 siRNA (m): sc-61282, PADI2 shRNA Plasmid (h): sc-61281-SH, PADI2 shRNA Plasmid (m): sc-61282-SH, PADI2 shRNA (h) Lentiviral Particles: sc-61281-V and PADI2 shRNA (m) Lentiviral Particles: sc-61282-V.

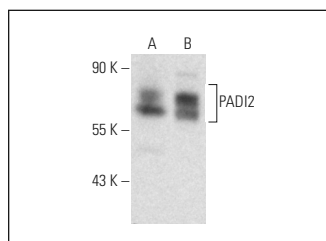
Molecular Weight of PADI2: 75 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

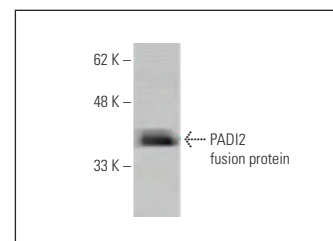
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



PADI2 (4D4): sc-293271. Western blot analysis of PADI2 expression in Jurkat (A) and HeLa (B) whole cell lysates.



PADI2 (4D4): sc-293271. Western blot analysis of human recombinant PADI2 fusion protein.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.