



## PADI4 (C-12): sc-47285

### BACKGROUND

The protein arginine deiminase (PAD) family of proteins are also often referred to as peptidylarginine deiminases. They catalyze the deimination of arginine residues of proteins. In the presence of calcium, the proteins in the PAD family act as catalysts for the post-translational modification reaction that converts methylarginine to citrulline. The PAD proteins are cytoplasmic proteins primarily detected in eosinophils and neutrophils. The gene locus of the gene encoding for PADI4 is believed to be a rheumatoid arthritis susceptibility locus. By increasing the citrullination of proteins in rheumatoid arthritis synovial tissues, it may play a role in the pathogenesis of the disease.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: PADI4 (human) mapping to 1p36.13; Padi4 (mouse) mapping to 4 E1.

### SOURCE

PADI4 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PADI4 of mouse origin.

### STORAGE

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

### PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-47285 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

PADI4 (C-12) is recommended for detection of PADI4 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PADI4 siRNA (m): sc-61284.

Molecular Weight of PADI4: 67 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### RESEARCH USE

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

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.