

Basic Information

Product Name	Anti-PADI4 Antibody
Gene Name	PADI4
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human
Tested Application	WB
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human PADI4.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	68 kDa
Dilution Ratios	Western blot (WB):1:500-2000

Storage

12 months from date of receipt, -20°C as supplied.

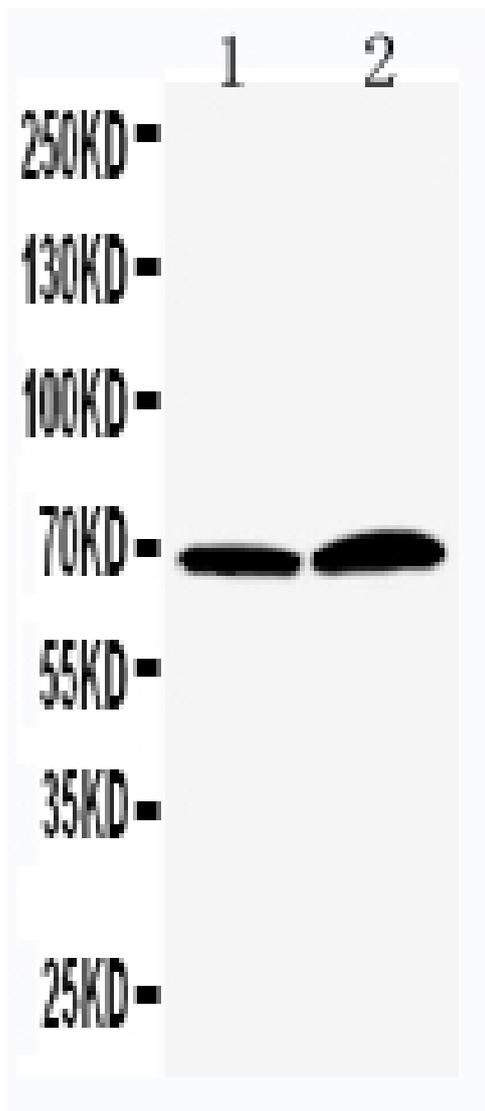
Background Information

PADI4 (Peptidylarginine Deiminase, Type IV), also known as PAD or PAD4, is a human protein which in humans is encoded by the PADI4 gene. Peptidylarginine deiminases, such as PADI4, make up a family of posttranslational modification enzymes that convert arginine residues to citrulline residues in the presence of calcium ion (Nakashima et al., 1999). Suzuki et al. (2003) found from sequence data that the PADI4 gene maps to 1p36. Cuthbert et al. (2004) described a process, deimination, that converts histone arginine to citrulline and antagonizes arginine methylation. They showed that PADI4 specifically deiminated arg2, arg8, arg17, and arg26 in the H3 tail. Deimination by PADI4 prevented arginine methylation by CARM1. Dimethylation of arginines prevented deimination by PADI4, although monomethylation still allowed deimination to take place. In vivo targeting experiments on an endogenous promoter demonstrated that PADI4 could repress hormone receptor-mediated gene induction. PADI4 was recruited to the pS2 promoter following hormone induction when the gene was transcriptionally downregulated, consistent with a repressive role for PADI4.

Reference

Anti-PADI4 Antibody被引用在1文献中。

Selected Validation Data



Western blot analysis of PADI4 using anti-PADI4 antibody (BA3341-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: PANC whole cell lysates,

Lane 2: 293T whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-PADI4 antigen affinity purified polyclonal antibody (BA3341-2) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for PADI4 at approximately 68 kDa. The expected band size for PADI4 is at 74 kDa.