BOSTER BIOLOGICAL TECHNOLOGY
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888-466-3604 | support@bosterbio.com | www.bosterbio.com

Anti-PADI4/PAD4 Antibody Picoband®

Catalog Number: PA2043

About PADI4

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.

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Overview

Product Name	Anti-PADI4/PAD4 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-PADI4/PAD4 Antibody catalog # PA2043. Tested in WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3. *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit

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Uniprot ID	Q9UM07

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human PADI4.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml, Human

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Anti-PADI4/PAD4 Antibody Picoband® (PA2043) Images



Anti-PADI4/PAD4 antibody, PA2043, Western blottingLane 1: PANC Cell LysateLane 2: 293T Cell Lysate

Anti-PADI4/PAD4 Antibody

For Research Use Only. Not for use in diagnostic procedures.