



Mouse Anti-Human PAD4 monoclonal antibody, clone 22G0 (CABT-L4586)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	The predicted size of PAD4 is 74.1 kDa and this clone detects a band at 74 kDa by western blot.
Immunogen	Full length recombinant PAD4 protein
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Human
Clone	22G0
Purification	Protein G purified
Conjugate	Unconjugated
Applications	ELISA, WB
Format	Liquid
Concentration	Lot specific
Size	100 µg
Buffer	PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
Preservative	0.02% sodium azide
Storage	At -20°C

BACKGROUND

Introduction

Protein arginine deiminases (PADs) are guanidino-modifying enzymes belonging to the amidinotransferase superfamily and are designated PAD1-4 and PAD6. All enzymes are cytosolic except for PAD4 which is localized in the nucleus. PAD4 is a homodimer that functions as a transcriptional coregulator to catalyze the conversion of specific arginine residues to citrulline in a calcium-dependent manner. PAD4 substrates include histones H2A, H3, and H4, whose post-translational modifications play a large role in gene regulation. PAD4 activity is increased in rheumatoid arthritis, producing an abundance of citrulline-containing proteins that can be recognized by autoantibodies, causing the immune system to attack its own tissues. PAD4 has also been implicated in several other diseases including multiple sclerosis, Alzheimer's, glaucoma, and cancer.

Keywords

HL-60 PAD;PADI4;Peptidylarginine Deiminase IV;Protein-arginine Deiminase type-4

GENE INFORMATION

UniProt ID

[Q9UM07](#)
