### For Research Use Only

# PADI2 Monoclonal antibody

Catalog Number:66386-1-lg Featured Product

5 Publications



**Basic Information** 

Catalog Number: 66386-1-lg

Size: 1600 µg/ml Source: Mouse Isotype:

Immunogen Catalog Number:

AG17612

lgG2b

GenBank Accession Number:

BC009701 GeneID (NCBI): 11240 **UNIPROT ID:** Q9Y2J8

Full Name: peptidyl arginine deiminase, type II

Calculated MW: 665 aa, 75 kDa Observed MW:

75 kDa

Positive Controls:

WB: human skeletal muscle tissue, HeLa cells, MCF-7 cells, pig brain tissue, rat brain tissue, mouse brain tissue, rat skeletal muscle tissue, mouse skeletal

**Purification Method:** 

Protein A purification

Recommended Dilutions:

WB 1:1000-1:6000 IHC 1:100-1:400

IF 1:50-1:500

CloneNo.:

2D8C12

muscle tissue

IHC: human breast cancer tissue, IF: human breast cancer tissue,

**Applications** 

**Tested Applications:** IF/ICC, IHC, WB, ELISA Cited Applications: IF, IHC, WB Species Specificity:

human, mouse, rat, rabbit, pig

**Cited Species:** human, rat, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

# **Background Information**

PADI2, also named as KIAA0994, PDI2, PAD-H19 and PAD2(Peptidylarginine deiminase II), belongs to the protein arginine deiminase family. It catalyzes the deimination of arginine residues of proteins. PADI2 may play a regulatory role in the expression of lactation related genes via histone citrullination during diestrus (PMID:20668670). PADI2 has two isoforms with MW 75 kDa and 49 kDa.

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Alerie G de la Fuente	32434922	Mol Cell Proteomics	WB
Hiroyuki Katayama	34112737	J Immunother Cancer	IHC
Hyun-Jung Kim	35218410	Cell Mol Life Sci	WB,IF

Storage

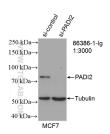
Store at -20°C. Stable for one year after shipment.

Storage Buffer

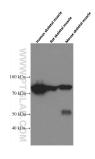
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

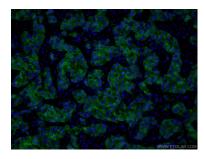
## **Selected Validation Data**



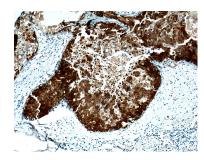
WB result of PADI2 antibody (66386-1-lg; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PADI2 transfected MCF-7 cells.



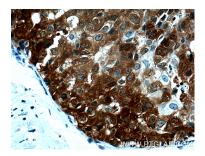
human skeletal muscle tissue, rat skeletal muscle tissue, mouse skeletal muscle tissue were subjected to SDS PAGE followed by western blot with 66386-1-lg (PADI2 Antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using 66386-1-Ig (PADI2 antibody) at dilution of 1:100 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 66386-1-lg (PADI2 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 66386-1-Ig (PADI2 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).