For Research Use Only

PADI2 Polyclonal antibody

Catalog Number:12110-1-AP

Featured Product

59 Publications



Basic Information

Catalog Number: GenBank Accession Number: 12110-1-AP BC009701 GeneID (NCBI): Size: $600 \mu g/ml$ 11240 **UNIPROT ID:** Source: Rabbit Q9Y2J8 Full Name: Isotype:

peptidyl arginine deiminase, type II

Calculated MW: Immunogen Catalog Number: AG2755 665 aa, 75 kDa Observed MW:

70-75 kDa, 50 kDa

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, IP, ELISA

Cited Applications:

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

human, mouse, rat, pig, canine

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

buffer pH 6.0

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:2000 IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:50-1:500 IF-P 1:50-1:500

IF/ICC 1:10-1:100

WB, IHC, IF, COIP, Blocking assay

WB: mouse brain tissue, MCF-7 cells, rat brain tissue

IP: mouse brain tissue.

IHC: human breast cancer tissue. IF-P: human breast cancer tissue, IF/ICC: BxPC-3 cells, HeLa cells

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
Jing Bai	32955682	Angiogenesis	WB,IF
Stanley B DeVore	29987187	Mol Cell Biol	
Daniel M Lewallen	26360112	ACS Chem Biol	WB

Storage

Storage:

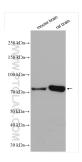
Store at -20°C. Stable for one year after shipment.

Storage Buffer

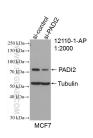
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

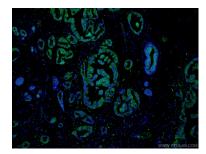
Selected Validation Data



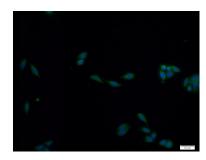
Various lysates were subjected to SDS PAGE followed by western blot with 12110-1-AP (PADI2 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



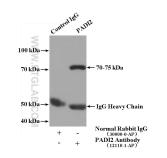
WB result of PADI2 antibody (12110-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PADI2 transfected MCF-7 cells.



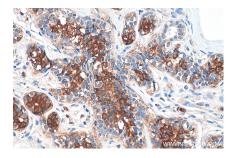
Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using 12110-1-AP (PADI2 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated Goat Anti-Rabbit IgG(H+L).



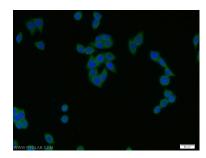
Immunofluorescent analysis of HeLa cells using 12110-1-AP (PADI2 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated Goat Anti-Rabbit IgG(H+L).



IP result of anti-PADI2 (IP:12110-1-AP, 3ug; Detection:12110-1-AP 1:300) with mouse brain tissue lysate 3600ug.



Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 12110-1-AP (PADI2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of BxPC-3 cells using 12110-1-AP (PADI2 antibody) at dilution of 1:25 and Alexa Fluor 488-conjugated Goat Anti-Rabbit $\lg G(H+L)$.