

## Basic Information

<b>Product Name</b>	Anti-ADAR Antibody	
<b>Gene Name</b>	ADAR	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse	
<b>Tested Application</b>	WB, IHC, ICC/IF, FCM	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human ADAR1 recombinant protein (Position: S128-Q346). Human ADAR1 shares 90.2% and 50.7% amino acid (aa) sequence identity with mouse and rat ADAR1, respectively.	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	110 kDa/150 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200

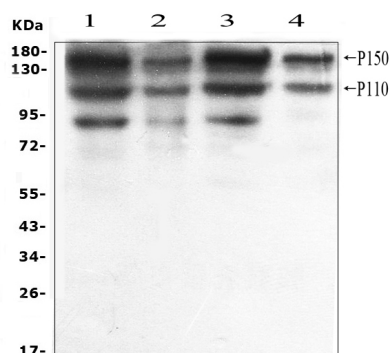
## Storage

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

## Background Information

Double-stranded RNA-specific adenosine deaminase, also known as ADAR1, is an enzyme that in humans is encoded by the ADAR gene. It is mapped to 1q21.3. This gene encodes the enzyme responsible for RNA editing by site-specific deamination of adenosines. This enzyme destabilizes double-stranded RNA through conversion of adenosine to inosine. Mutations in this gene have been associated with dyschromatosis symmetrica hereditaria. Alternative splicing results in multiple transcript variants.

## Selected Validation Data



Western blot analysis of ADAR using anti-ADAR antibody (PB1028).

The sample well of each lane was loaded with 30  $\mu$ g of sample under reducing conditions.

Lane 1: HELA whole cell lysates,

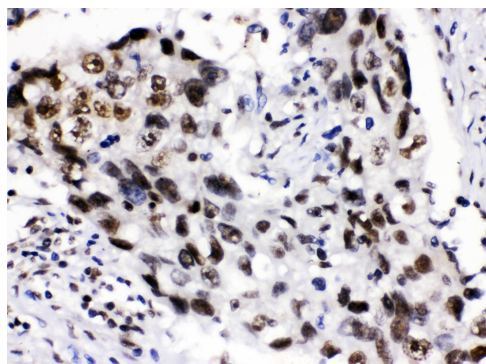
Lane 2: A549 whole cell lysates,

Lane 3: MCF-7 whole cell lysates,

Lane 4: HEPG2 whole cell lysates.

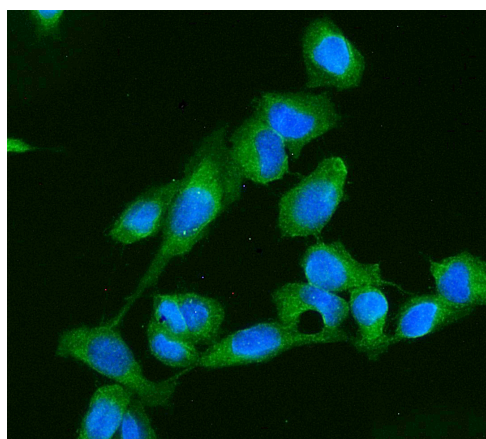
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-ADAR antigen affinity purified polyclonal antibody (PB1028) 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 ADAR at approximately 110 kDa/150 kDa. The expected band size for ADAR is at 136 kDa.



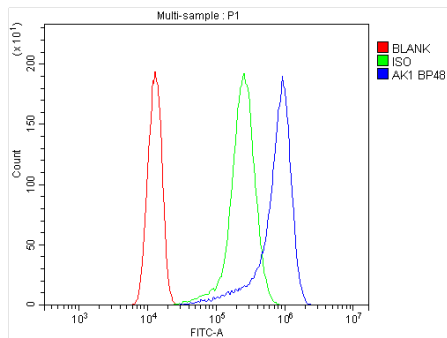
IHC analysis of ADAR using anti-ADAR antibody (PB1028).

ADAR was detected in a paraffin-embedded section of human lung cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-ADAR Antibody (PB1028) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of ADAR using anti-ADAR antibody (PB1028).

ADAR was detected in an immunocytochemical section of U2OS cells. The section was incubated with rabbit anti-ADAR Antibody (PB1028) at a dilution of 1:100. Fluoro488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow cytometry analysis of A431 cell(1:100) Fluoro488 conjugated goat anti-rabbit IgG(blue) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG Fluoro488. Unlabelled sample (Red line).