

Basic Information

Product Name	Anti-ADAR Antibody (Clone#AFCB-1)	
Gene Name	ADAR	
Source	Rabbit	
Clonality	Monoclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.	
Immunogen	A synthesized peptide derived from human ADAR1 Converts multiple adenosines to inosines and creates I/U mismatched base pairs in double-helical RNA substrates without apparent sequence specificity.	
Concentration	500 ug/ml	
Purification	Affinity-chromatography	
Observed MW	110 kDa/150 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-200
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-200
	Flow Cytometry (FCM):	1:50

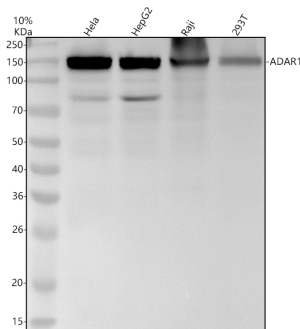
Storage

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 anti-ADAR1 antibody (BM5691). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HeLa whole cell lysates,

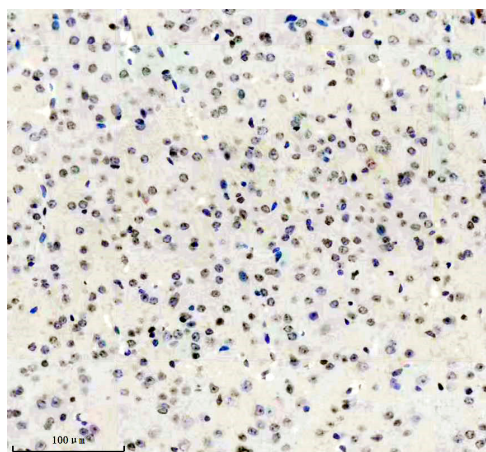
Lane 2: human HepG2 whole cell lysates,

Lane 3: human Raji whole cell lysates,

Lane 4: human 293T whole cell lysates.

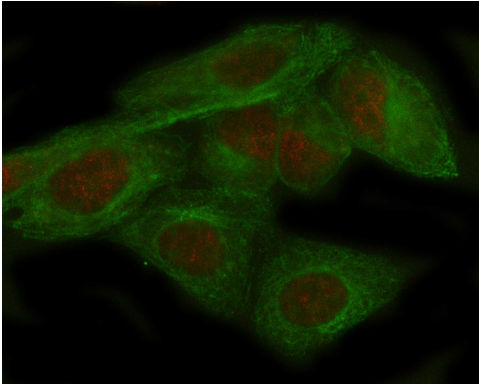
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-ADAR1 antigen affinity purified monoclonal antibody (BM5691) 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 ADAR1 at approximately 150 kDa. The expected band size for ADAR1 is at 136 kDa.



IHC analysis of ADAR1 using anti-ADAR1 antibody (BM5691).

ADAR1 was detected in a paraffin-embedded section of mouse brain tissue. The tissue section was incubated with rabbit anti-ADAR1 Antibody (BM5691) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of ADAR using anti-ADAR antibody (BM5691) and anti-Beta Tubulin antibody (M01857-3).

ADAR was detected in an immunocytochemical section of HeLa cells. Cy3-Conjugated Anti-rabbit IgG Secondary Antibody (Red) (Catalog # BA1032) and Fluoro488-conjugated Anti-mouse IgG Secondary Antibody (Green) (Catalog # BA1126) were used as secondary antibody.