

Anti-ABR Picoband Antibody

Catalog # ABO12657

Product Information

Application	WB, IHC-P
Primary Accession	Q12979
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Active breakpoint cluster region-related protein(ABR) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	29
Other Names	Active breakpoint cluster region-related protein, ABR
Calculated MW	97598
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 µg/ml, Mouse, Rat, Human
Tissue Specificity	Highly enriched in the brain. Much weaker expression in heart, lung and muscle.
Source	Eukaryota
Protein Name	Active breakpoint cluster region-related protein
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Na ₃ N.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human ABR (370-407aa HPFPDHELEDMMKMKISALKSEIQKEKANKGQSRAIERL), different from the related mouse sequence by one amino acid.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated

freezing and thawing.

Protein Information

Name	ABR (HGNC:81)
Function	Protein with a unique structure having two opposing regulatory activities toward small GTP-binding proteins. The C-terminus is a GTPase-activating protein domain which stimulates GTP hydrolysis by RAC1, RAC2 and CDC42. Accelerates the intrinsic rate of GTP hydrolysis of RAC1 or CDC42, leading to down-regulation of the active GTP-bound form (PubMed: 17116687 , PubMed: 7479768). The central Dbl homology (DH) domain functions as a guanine nucleotide exchange factor (GEF) that modulates the GTPases CDC42, RHOA and RAC1. Promotes the conversion of CDC42, RHOA and RAC1 from the GDP-bound to the GTP-bound form (PubMed: 7479768). Functions as an important negative regulator of neuronal RAC1 activity (By similarity). Regulates macrophage functions such as CSF-1 directed motility and phagocytosis through the modulation of RAC1 activity (By similarity).
Cellular Location	Cell projection, dendritic spine {ECO:0000250 UniProtKB:Q5SSL4}. Cell projection, axon {ECO:0000250 UniProtKB:Q5SSL4}. Synapse {ECO:0000250 UniProtKB:A0A0G2JTR4}
Tissue Location	Highly enriched in the brain. Much weaker expression in heart, lung and muscle

Background

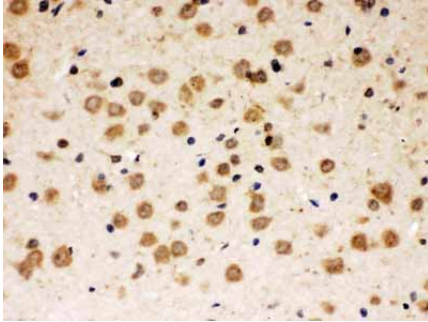
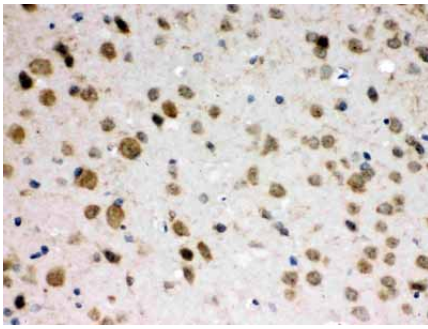
This ABR gene encodes a protein that is similar to the protein encoded by the breakpoint cluster region gene located on chromosome 22. The protein encoded by this gene contains a GTPase-activating protein domain, a domain found in members of the Rho family of GTP-binding proteins. Functional studies in mice determined that this protein plays a role in vestibular morphogenesis. Alternatively spliced transcript variants have been reported for this gene.

Images

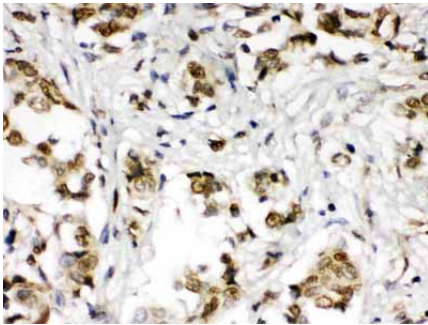


Western blot analysis of ABR expression in rat brain extract (lane 1) and mouse brain extract (lane 2). ABR at 98KD was detected using rabbit anti- ABR Antigen Affinity purified polyclonal antibody (Catalog # ABO12657) at 0.5 μ g/mL. The blot was developed using chemiluminescence (ECL) method .

ABR was detected in paraffin-embedded sections of mouse brain tissues using rabbit anti- ABR Antigen Affinity purified polyclonal antibody (Catalog # ABO12657) at 1 μ g/mL. The immunohistochemical section was developed using SABC method .



ABR was detected in paraffin-embedded sections of rat brain tissues using rabbit anti- ABR Antigen Affinity purified polyclonal antibody (Catalog # ABO12657) at 1 μ g/mL. The immunohistochemical section was developed using SABC method .



ABR was detected in paraffin-embedded sections of human mammary cancer tissues using rabbit anti- ABR Antigen Affinity purified polyclonal antibody (Catalog # ABO12657) at 1 μ g/mL. The immunohistochemical section was developed using SABC method .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.