

**Anti-ABR Picoband Antibody**  
Catalog # ABO12657**Specification****Anti-ABR Picoband Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">Q12979</a>
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.

**Anti-ABR Picoband Antibody - Additional Information****Gene ID 29****Other Names**

Active breakpoint cluster region-related protein, ABR

**Calculated MW**

97598 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat<br><br>Western blot, 0.1-0.5 µg/ml, Mouse, Rat, Human<br>

**Tissue Specificity**

Highly enriched in the brain. Much weaker expression in heart, lung and muscle.

**Protein Name**

Active breakpoint cluster region-related protein

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence in the middle region of human ABR (370-407aa HPFPDHELEDMMKISALKSEIQKEKANKGQSRAIERL), 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 r°Constitution, 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.**

**Anti-ABR Picoband Antibody - 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:<a href="http://www.uniprot.org/citations/17116687" target="\_blank">17116687</a>, PubMed:<a href="http://www.uniprot.org/citations/7479768" target="\_blank">7479768</a>). 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:<a href="http://www.uniprot.org/citations/7479768" target="\_blank">7479768</a>). 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}

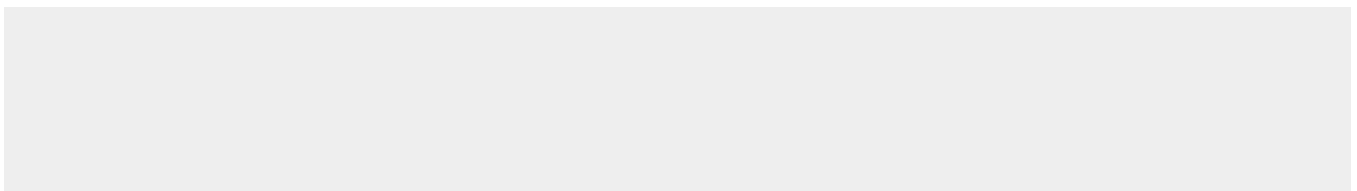
**Tissue Location**

Highly enriched in the brain. Much weaker expression in heart, lung and muscle

**Anti-ABR Picoband Antibody - Protocols**

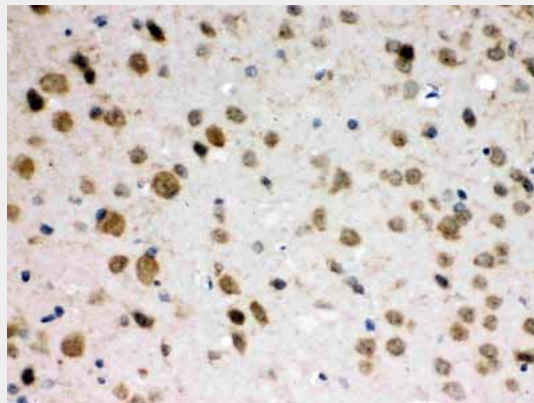
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

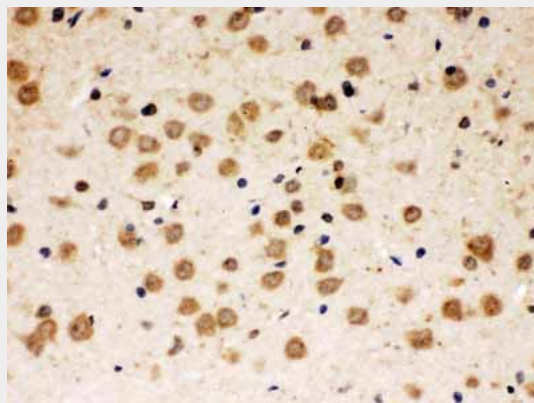
**Anti-ABR Picoband Antibody - Images**



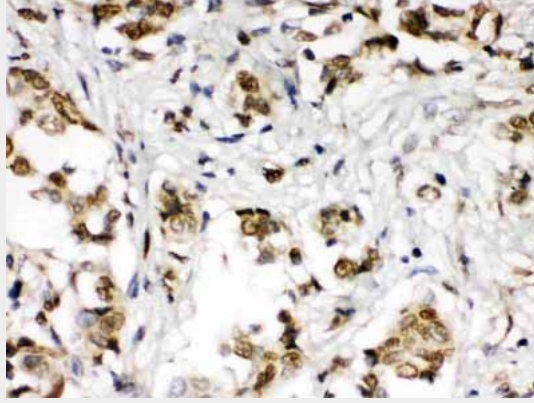
Western blot analysis of ABR expression in rat brain extract (lane 1) and mouse brain extract (lane 2). ABR at 98KD was detected using rabbit anti- ABR Antigen Affinity purified polyclonal antibody (Catalog # ABO12657) at 0.5  $\mu$ g/mL. The blot was developed using chemiluminescence (ECL) method .



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

#### **Anti-ABR Picoband Antibody - 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.