10320 Camino Santa Fe, Suite A
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# KD-Validated Anti-BCR Rabbit Monoclonal Antibody

**Rabbit monoclonal antibody**
**Catalog # AGI1983**

## Specification

### KD-Validated Anti-BCR Rabbit Monoclonal Antibody - Product Information

| | |
|---|---|
| Application | **WB, FC, ICC** |
| Primary Accession | P11274 |
| Reactivity | **Human, Mouse** |
| Clonality | **Monoclonal** |
| Isotype | **Rabbit IgG** |
| Calculated MW | **Predicted, 143 kDa, observed, 160 kDa KDa** |
| Gene Name | **BCR** |
| Aliases | **BCR; BCR Activator Of RhoGEF And GTPase; D22S662; D22S11; BCR1; CML; PHL; ALL; BCR, RhoGEF And GTPase Activating Protein; Breakpoint Cluster Region Protein; Renal Carcinoma Antigen NY-REN-26; Breakpoint Cluster Region; EC 2.7.11.1; BCR/FGFR1 Chimera Protein; FGFR1/BCR Chimera Protein** |
| Immunogen | **A synthesized peptide derived from human Bcr** |

### KD-Validated Anti-BCR Rabbit Monoclonal Antibody - Additional Information

| | |
|---|---|
| Gene ID | **613** |

**Other Names**
Breakpoint cluster region protein, 2.7.11.1, Renal carcinoma antigen NY-REN-26, BCR (<a href="http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=1014" target="_blank">HGNC:1014</a>), BCR1, D22S11

### KD-Validated Anti-BCR Rabbit Monoclonal Antibody - Protein Information

**Name** BCR (HGNC:1014)

**Synonyms** BCR1, D22S11

**Function**
Protein with a unique structure having two opposing regulatory activities toward small GTP-binding proteins. The C-terminus is a GTPase-activating protein (GAP) 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/1903516" target="_blank">1903516</a>, PubMed:<a href="http://www.uniprot.org/citations/7479768" target="_blank">7479768</a>). The central Dbl homology (DH) domain functions as 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/23940119" target="_blank">23940119</a>, PubMed:<a href="http://www.uniprot.org/citations/7479768" target="_blank">7479768</a>). The amino terminus contains an intrinsic kinase activity (PubMed:<a href="http://www.uniprot.org/citations/1657398" target="_blank">1657398</a>). Functions as an important negative regulator of neuronal RAC1 activity (By similarity). Regulates macrophage functions such as CSF1-directed motility and phagocytosis through the modulation of RAC1 activity (PubMed:<a href="http://www.uniprot.org/citations/17116687" target="_blank">17116687</a>). Plays a major role as a RHOA GEF in keratinocytes being involved in focal adhesion formation and keratinocyte differentiation (PubMed:<a href="http://www.uniprot.org/citations/23940119" target="_blank">23940119</a>).

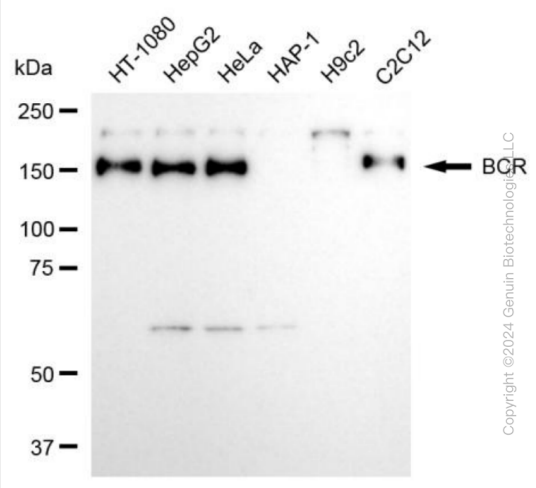
**Cellular Location**
Postsynaptic density {ECO:0000250|UniProtKB:Q6PAJ1}. Cell projection, dendritic spine {ECO:0000250|UniProtKB:Q6PAJ1}. Cell projection, axon {ECO:0000250|UniProtKB:Q6PAJ1}. Synapse {ECO:0000250|UniProtKB:F1LXF1}

## KD-Validated Anti-BCR Rabbit Monoclonal Antibody - Protocols

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

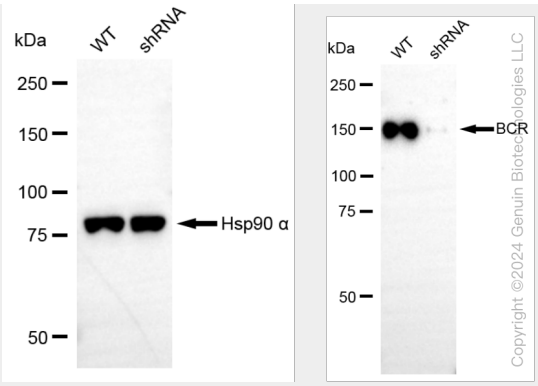
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## KD-Validated Anti-BCR Rabbit Monoclonal Antibody - Images

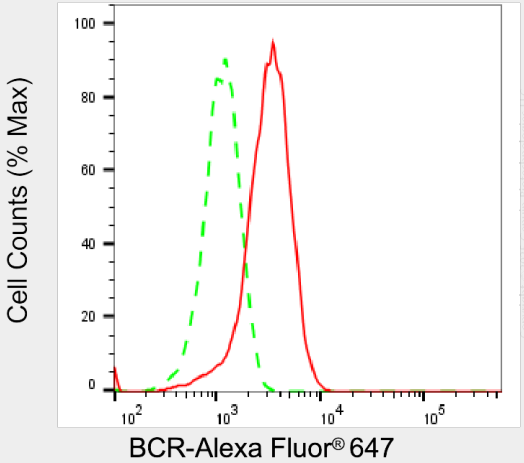



Western blotting analysis using anti-BCR antibody (Cat#AGI1983). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-BCR antibody (Cat#AGI1983, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

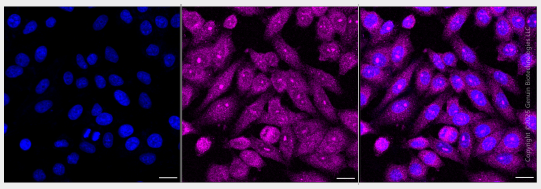
10320 Camino Santa Fe, Suite A
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999




Western blotting analysis using anti-BCR antibody (Cat#AGI1983). BCR expression in wild-type (WT) and BCR shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-BCR antibody (Cat#AGI1983, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.




Flow cytometric analysis of BCR expression in HepG2 cells using anti-BCR antibody (Cat#AGI1983, 1:2,000). Green, isotype control; red, BCR.



Immunocytochemical staining of HepG2 cells with anti-BCR antibody (Cat#AGI1983, 1:1,000). Nuclei were stained blue with DAPI; BCR was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.