

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human RB2/BDKRB2 in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 471902
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0 mouse myeloma cell line transfected with human RB2/BDKRB2 Met1-Gln391 Accession # P30411
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

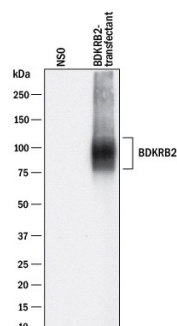
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
Immunohistochemistry	5-25 µg/mL	See Below

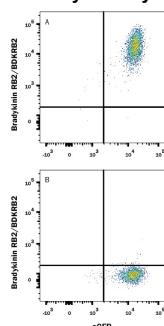
DATA

Western Blot



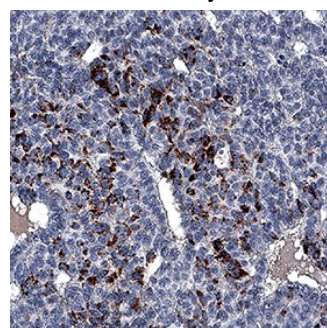
Detection of Human Bradykinin RB2/BDKRB2 by Western Blot. Western blot shows lysates of NS0 mouse myeloma cell line either mock transfected or transfected with human Bradykinin RB2/BDKRB2. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human Bradykinin RB2/BDKRB2 Monoclonal Antibody (Catalog # MAB9434) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for Bradykinin RB2/BDKRB2 at approximately 80-100 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

Flow Cytometry



Detection of Bradykinin RB2/BDKRB2 in HEK293 Human Cell Line Transfected with Human Bradykinin RB2/BDKRB2 and eGFP by Flow Cytometry HEK293 human cell line transfected with (A) Human Bradykinin RB2/BDKRB2 or (B) irrelevant protein, and eGFP was stained with Mouse Anti-Human Bradykinin RB2/BDKRB2 Monoclonal Antibody (Catalog # MAB9434) followed by APC-conjugated Goat anti-Mouse IgG Secondary Antibody (Catalog # F0101B). Quadrant markers were set based on Mouse IgG1 Isotype Control Antibody (Catalog # MAB002). View our protocol for [Staining Membrane-associated Proteins](#).

Immunohistochemistry



Bradykinin RB2/BDKRB2 in Human Liver Cancer Tissue. Bradykinin RB2/BDKRB2 was detected in immersion fixed paraffin-embedded sections of human liver cancer tissue using Mouse Anti-Human Bradykinin RB2/BDKRB2 Monoclonal Antibody (Catalog # MAB9434) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm and cell surfaces. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Bradykinin RB2 (BDKRB2) is a receptor for bradykinin. The 9 aa bradykinin peptide elicits many responses including vasodilation, edema, smooth muscle spasm and pain fiber stimulation. BDKRB2 expression is widespread in normal smooth muscle tissue and neurons. BDKRB2 associates with G proteins that stimulate a phosphatidylinositol-calcium second messenger system. BDKRB2 forms a complex with PECAM1 and GNAQ and interacts with PECAM1. Aging cardiac endothelial cells gradually lose their capacity to express BDKRB2. This loss appears to be parallel with a loss of the angiogenic potential of the aging cells.