

For Research Use Only

# pan-RAS Recombinant antibody, PBS Only (Detector)

Catalog Number: 81615-1-PBS



## Basic Information

<b>Catalog Number:</b> 81615-1-PBS	<b>GenBank Accession Number:</b> BC013572	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 3845	<b>CloneNo.:</b> 2I22
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P01116	
<b>Isotype:</b> IgG	<b>Full Name:</b> v-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog	
<b>Immunogen Catalog Number:</b> AG2700	<b>Calculated MW:</b> 188 aa, 21 kDa	
	<b>Observed MW:</b> 21 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, Cytometric bead array, Indirect ELISA

**Species Specificity:**  
human, mouse, rat, pig

## Product Information

81615-1-PBS targets pan-RAS as part of a matched antibody pair:

MP80009-1: 60309-1-PBS capture and 81615-1-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## Background Information

The 21 kDa guanine-nucleotide binding proteins (K-Ras, H-Ras, and N-Ras) belong to the Ras oncogene family, whose members are related to the transforming genes of mammalian sarcoma retroviruses. K-Ras, H-Ras, and N-Ras have similar structure and sequences. These proteins can bind GTP and GDP, and they have intrinsic GTPase activity. The ras genes are ubiquitously expressed although mRNA analysis suggests different level expression in tissue. Mutations in each ras gene frequently were found in different tumors, suggesting their involvement in the development of specific neoplasia. This antibody can recognize K-Ras, H-Ras, and N-Ras.

## Storage

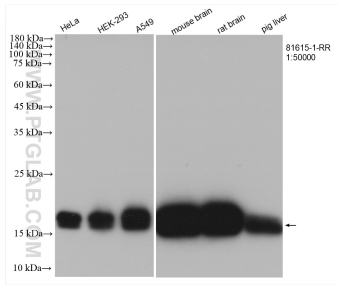
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

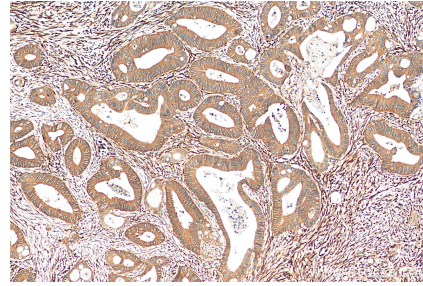
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

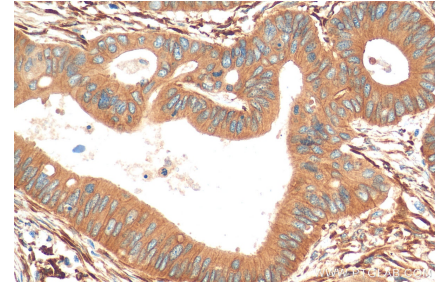
## Selected Validation Data



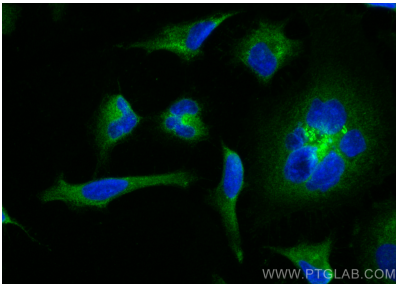
Various lysates were subjected to SDS PAGE followed by western blot with 81615-1-RR (pan-RAS antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 81615-1-PBS in a different storage buffer formulation.



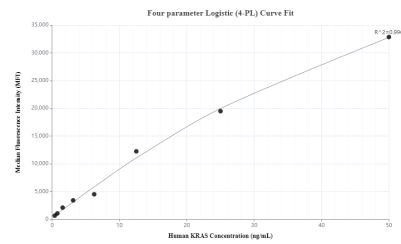
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 81615-1-RR (pan-RAS antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81615-1-PBS in a different storage buffer formulation.



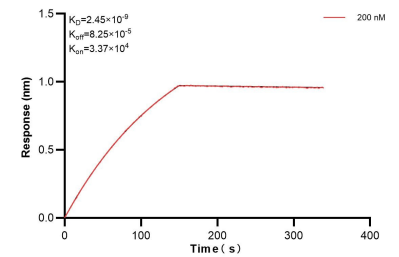
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 81615-1-RR (pan-RAS antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81615-1-PBS in a different storage buffer formulation.



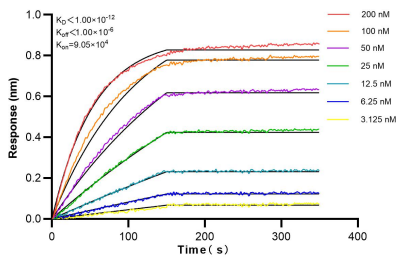
Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using pan-RAS antibody (81615-1-RR, Clone: 2122) at dilution of 1:1000 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). This data was developed using the same antibody clone with 81615-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP80009-1, KRAS Hybrid Matched Antibody Pair, PBS Only. Capture antibody: 60309-1-PBS. Detection antibody: 81615-1-PBS. Standard: Ag2700. Range: 0.391-50 ng/mL.



Bi-layer interferometry (BLI) kinetic assay of 81615-1-PBS against Human pan-RAS was performed. The affinity constant is 2.45 nM.



Bi-layer interferometry (BLI) kinetic assays of 81615-1-RR against Human pan-RAS were performed. The affinity constant is below 1 pM.