

## pan-RAS Recombinant antibody

Catalog Number: 81615-1-RR

## Basic Information

Catalog Number: 81615-1-RR	GenBank Accession Number: BC013572	Purification Method: Protein A purification
Size: 1000 µg/ml	GeneID (NCBI): 3845	CloneNo.: 2122
Source: Rabbit	UNIPROT ID: P01116	Recommended Dilutions: WB 1:20000-1:100000 IHC 1:500-1:2000 IF/ICC 1:500-1:2000
Isotype: IgG	Full Name: v-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog	
Immunogen Catalog Number: AG2700	Calculated MW: 188 aa, 21 kDa Observed MW: 21 kDa	

## Applications

Tested Applications:  
WB, IF/ICC, IHC, ELISA

Species Specificity:  
Human, mouse, rat, pig

**Note-IHC: suggested antigen retrieval with  
TE buffer pH 9.0; (\*) Alternatively, antigen  
retrieval may be performed with citrate  
buffer pH 6.0**

Positive Controls:

WB : HeLa cells, HEK-293 cells, A549 cells, mouse brain  
tissue, rat brain tissue, pig liver tissue

IHC : human colon cancer tissue,

IF/ICC : HeLa cells,

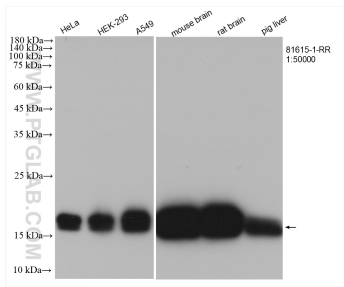
## Background Information

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.

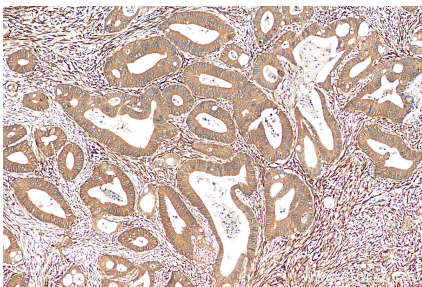
## Storage

Storage:  
Store at -20°C. Stable for one year after shipment.  
Storage Buffer:  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

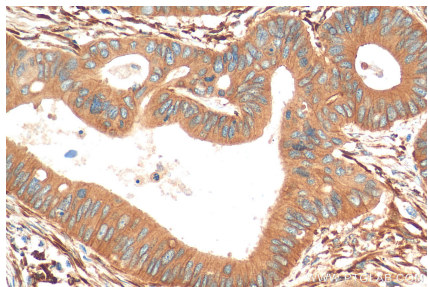
Selected Validation Data



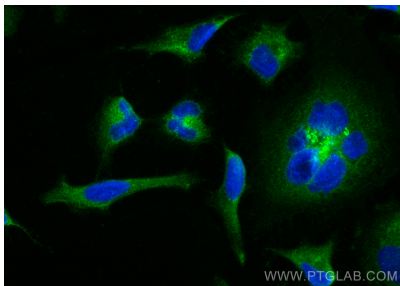
Various lysates were subjected to SDS PAGE followed by western blot with 81615-1-RR (pan-RAS antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.



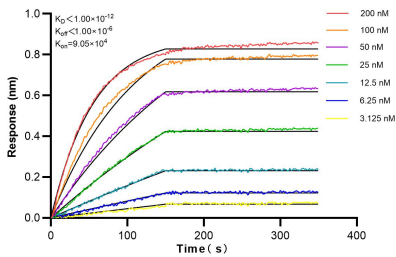
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 81615-1-RR (pan-RAS antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



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).



Bioluminescence resonance energy transfer (BRET) kinetic assays of 81615-1-RR against Human pan-RAS were performed. The affinity constant is below 1 pM.