

For Research Use Only

# STK39 Recombinant antibody

Catalog Number: 83081-3-RR



## Basic Information

<b>Catalog Number:</b> 83081-3-RR	<b>GenBank Accession Number:</b> BC166614	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 27347	<b>CloneNo.:</b> 230382G12
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q9UEW8	<b>Recommended Dilutions:</b> IHC 1:50-1:500 IF/ICC 1:125-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> serine threonine kinase 39 (STE20/SPS1 homolog, yeast)	
<b>Immunogen Catalog Number:</b> AG34503	<b>Calculated MW:</b> 59 kDa	

## Applications

<b>Tested Applications:</b> IHC, IF/ICC, FC (Intra), ELISA	<b>Positive Controls:</b>
<b>Species Specificity:</b> human	<b>IHC :</b> mouse brain tissue, <b>IF/ICC :</b> HepG2 cells,
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

STK39 (Serine/Threonine Kinase 39) is a proline- and alanine-rich Ste20-related kinase (also named as SPAK), which is composed of a short N-terminal proline and alanine repeats (PAPA box), a kinase catalytic domain and a C-terminal regulatory domain (PMID: 16382158). In mammals, STK39 plays an important role in ion homeostasis by regulating the cation chloride cotransporters' activities, which is crucial for the modulation of renal salt transport and blood pressure (PMID: 33500714). Notably, STK39 is also implicated in the regulation of tumor cell proliferation, migration, and invasion in multiple cancers, including osteosarcoma and cervical cancer (PMID: 34335956).

## Storage

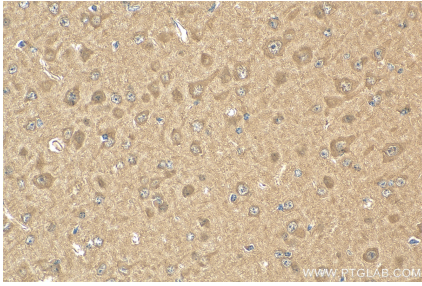
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

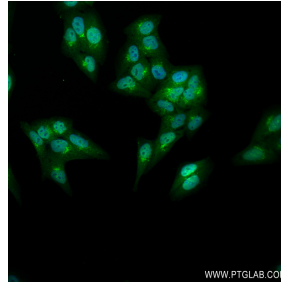
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
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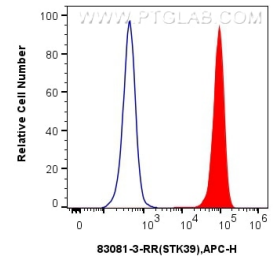
## Selected Validation Data



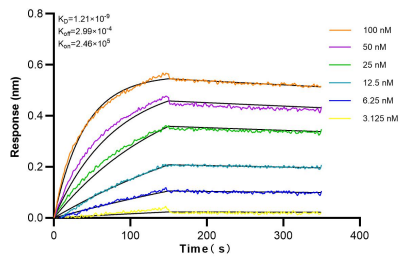
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 83081-3-RR (STK39 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using STK39 antibody (83081-3-RR, Clone: 230382G12) at dilution of 1:250 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).



$1 \times 10^6$  Daudi cells were intracellularly stained with 0.25  $\mu$ g Anti-Human STK39 (83081-3-RR, Clone: 230382G12) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25  $\mu$ g Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.



Biolayer interferometry (BLI) kinetic assays of 83081-3-RR against Human STK39 were performed. The affinity constant is 1.21 nM.