

For Research Use Only

TLK2 Polyclonal antibody

Catalog Number: 13979-1-AP

Featured Product

3 Publications



Basic Information

Catalog Number:

13979-1-AP

Size:

150ul, Concentration: 450 ug/ml by Nanodrop and 173 ug/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG5022

GenBank Accession Number:

BC044925

GeneID (NCBI):

11011

UNIPROT ID:

Q86UE8

Full Name:

tousled-like kinase 2

Calculated MW:

772 aa, 88 kDa

Observed MW:

85 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:2000

IHC 1:50-1:500

IF/ICC 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Cited Applications:

WB, IHC

Species Specificity:

human, mouse, rat

Cited Species:

human

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 : MCF-7 cells, HeLa cells

IHC : human breast cancer tissue,

IF/ICC : HeLa cells,

Background Information

Tousled-like kinases (TLKs) are a family of serine/threonine kinases located in the nucleus that promote S-phase chromatin assembly and mitotic chromosome segregation. There are two genes in the TLK family-TLK1 and TLK2 (PMID: 14561777). Mutation in TLK2 are associated with an elevated risk of breast cancer (PMID: 27489360). Tousled-like kinase 2 (TLK2) is a key factor in glioblastoma that modulates SRC signaling, thereby driving tumor malignancy. TLK2 is commonly upregulated in glioblastoma, and such upregulation was associated with poor patient outcomes. TLK2 overexpression induced cell growth, migration, invasion, and epithelial-mesenchymal transition, and cell cycle arrest, while TLK2 knockdown had the opposite effect (PMID: 30207834). It can detect 3 isoforms of 88, 85 and 82 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Ting He	39145094	Transl Cancer Res	WB
Bang Liu	38343446	Front Genet	IHC
Mingliang Wang	37542132	Cancer Gene Ther	WB

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

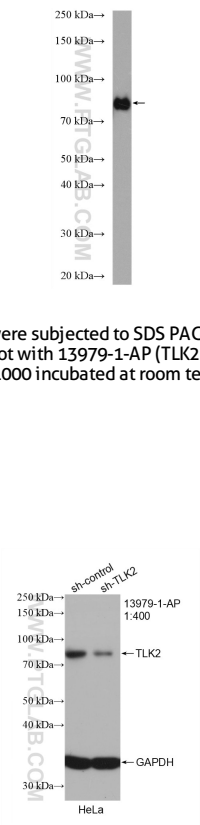
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

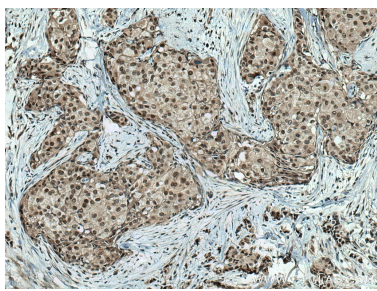
E: proteintech@ptglab.com
W: ptglab.com

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

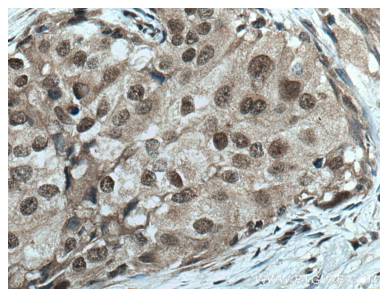
Selected Validation Data



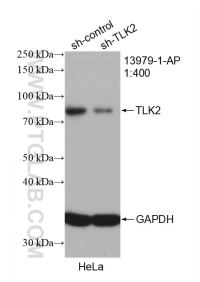
MCF-7 cells were subjected to SDS PAGE followed by western blot with 13979-1-AP (TLK2 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



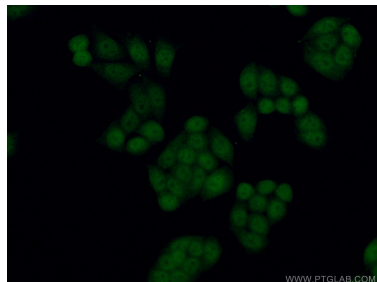
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 13979-1-AP (TLK2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 13979-1-AP (TLK2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



WB result of TLK2 antibody (13979-1-AP; 1:400; incubated at room temperature for 1.5 hours) with sh-Control and sh-TLK2 transfected HeLa cells.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using 13979-1-AP (TLK2 antibody) at dilution of 1:100 and CoraLite488-Conjugated Goat Anti-Rabbit IgG(H+L).