

For Research Use Only

WDR45/WIPI4 Polyclonal antibody

Catalog Number: 19194-1-AP

Featured Product

8 Publications



Basic Information

Catalog Number: 19194-1-AP	GenBank Accession Number: BC000464	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 450 µg/ml by Nanodrop and 300 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 11152	Recommended Dilutions: WB 1:1000-1:6000 IHC 1:50-1:500 IF 1:50-1:500
Source: Rabbit	Full Name: WD repeat domain 45	
Isotype: IgG	Calculated MW: 40 kDa	
Immunogen Catalog Number: AG6741	Observed MW: 40 kDa	

Applications

Tested Applications: IF, IHC, WB, ELISA	Positive Controls: WB : mouse skeletal muscle tissue, rat skeletal muscle tissue IHC : human liver tissue, IF : HeLa cells,
Cited Applications: IP, WB	
Species Specificity: human, mouse, rat	
Cited Species: human, mouse	
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	

Background Information

WD repeat domain phosphoinositide-interacting protein 4 (WDR45) is also named as WDRX1, WDRX14 and WIPI4, and belongs to the WD repeat PROPPIN family. WDR45 is highly conserved in mammals, and the amino acid sequences of the human, mouse, pig, bovine and horse protein have more than 97% identity (PMID:20505359). WDR45 is component of the autophagy machinery that controls the major intracellular degradation process (PMID:23435086, PMID:28561066). Together with WIPI1, WIPI2 and WIPI3/WDR45B, it forms the WIPI (WD repeat domain, phosphoinositide interacting) protein family. And this is why WDR45 is also known as WIPI4 (PMID:11814058). The best characterized molecular function of WDR45 is promoting lipid transfer together with ATG2 proteins between adjacent membranes. This function at the phagophore-ER membrane contact sites is important for autophagy (PMID:30185561, PMID:31721365). WDR45 is activated by the STK11/AMPK signaling pathway upon starvation. WDR45 is involved in autophagosome assembly downstream of WIPI2, regulating the size of forming autophagosomes (PMID:28561066).

Notable Publications

Author	Pubmed ID	Journal	Application
Hye Eun Lee	34769084	Int J Mol Sci	WB
Luisa Aring	34837396	J Neurochem	WB
Alexander S Häusl	35263141	Sci Adv	WB,IP

Storage

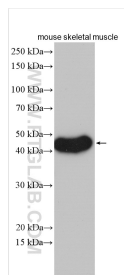
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

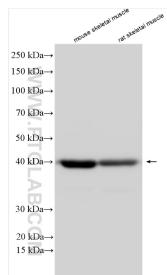
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

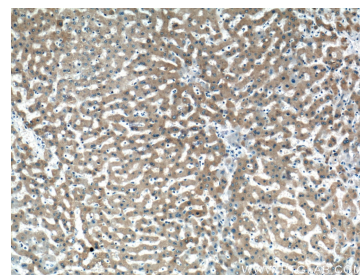
Selected Validation Data



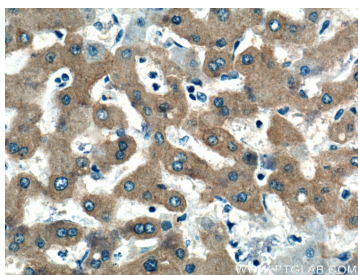
mouse skeletal muscle tissue were subjected to SDS PAGE followed by western blot with 19194-1-AP (WDR45 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



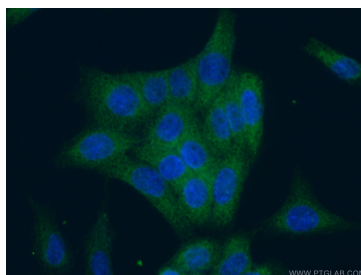
Various lysates were subjected to SDS PAGE followed by western blot with 19194-1-AP (WDR45 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 19194-1-AP (WDR45 Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 19194-1-AP (WDR45 Antibody) at dilution of 1:200 (under 40x lens).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using 19194-1-AP (WDR45 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).