For Research Use Only

APPL1 Monoclonal antibody

Catalog Number:68195-1-lg Featured Product



Basic Information

IgG2b adaptor protein, phosphotyrosine interaction, PH domain and leucine zipper containing 1

Calculated MW: 709 aa, 80 kDa Observed MW: 80 kDa Purification Method: Protein A purification

CloneNo.: 1B7B11

Recommended Dilutions: WB 1:5000-1:50000 IHC 1:200-1:800 IF/ICC 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

Species Specificity:

human, mouse, rat, pig, rabbit

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: LNCaP cells, Jurkat cells, rabbit heart tissue, HepG2 cells, pig heart tissue, HEK-293 cells, HeLa cells, rat heart tissue

IHC: human colon cancer tissue,

IF/ICC: HepG2 cells,

Background Information

Adaptor protein, phosphotyrosine interaction, PH domain and leucine zipper containing 1 (APPL1), a binding partner of Akt2 and an important regulator of INS signaling, plays a key role in the regulation of INS secretion [PMID:22615370]. APPL1 interacts with adiponectin receptors and mediates the INS-sensitizing effects of adiponectin in muscle and endothelial cells. It also participates in nuclear signaling and transcriptional regulation, mostly by modulating the activity of various nuclear factors [PMID:22685329]. Apart from its role in endocytosis and endosomal transport, APPL1 was reported to undergo nucleocytoplasmic shuttling and participate in transcriptional regulation, e.g. by interactions with histone deacetylases (HDACs) [PMID:19686092].

Storage

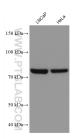
Storage:

Store at -20°C. Stable for one year after shipment. Storage Buffer:

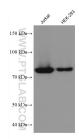
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

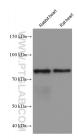
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68195-1-lg (APPL1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



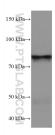
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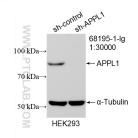
Various lysates were subjected to SDS PAGE followed by western blot with 68195-1-1g (APPL1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



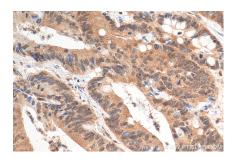
HepG2 cells were subjected to SDS PAGE followed by western blot with 68195-1-1g (APPL1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



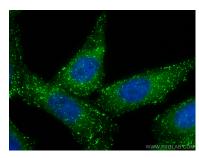
pig heart tissue were subjected to SDS PAGE followed by western blot with 68195-1-lg (APPL1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



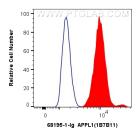
WB result of APPL1 antibody (68195-1-lg; 1:30000; incubated at room temperature for 1.5 hours) with sh-Control and sh-APPL1 transfected HEK-293 cells.



Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 68195-1-Ig (APPL1 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using APPL1 antibody (68195-1-Ig, Clone: 1B7B11) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



1X10^6 HepG2 cells were intracellularly stained with 0.4 ug Anti-Human APPL1 (68195-1-lg, Clone:1B7B11) and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG2b Isotype Control (MPC-11) (65128-1-lg, Clone: MPC-11) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).