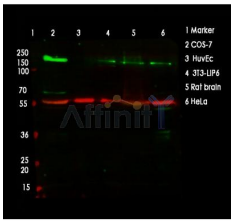
ZO 1 Ab

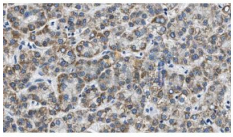
Cat.#: AF5145	Concn.: 1mg/ml	Mol.Wt.: 195 kDa
Size: 100ul,200ul	Source: Rabbit	Clonality: Polyclonal

Application:	WB 1:500-1:2000, IHC 1:50-1:200, IF 1:100-1:500
Reactivity:	Human,Mouse,Rat,Pig
Purification:	The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).
Specificity:	ZO 1 Ab detects endogenous levels of total ZO 1.
Immunogen:	A synthesized peptide derived from human ZO 1.
Uniprot:	Q07157
Description:	The N-terminal may be involved in transducing a signal required for tight junction assembly, while the C-terminal may have specific properties of tight junctions. The alpha domain might be involved in stabilizing junctions.
Subcellular Location:	Cell membrane. Cell junction > tight junction. Movement of ZO-1 from the cytoplasm to membrane is an early event occurring concurrently with cell-cell contact.
Tissue Specificity:	The alpha-containing isoform is found in most epithelial cell junctions. The short isoform is found both in endothelial cells and the highly specialized epithelial junctions of renal glomeruli and Sertoli cells of the seminiferous tubules.
Similarity:	The 244-aa domain between residues 633 and 876 is the primary occludin (OCLN)-binding site and is required for stable association with the tight junction (PubMed:9792688).The C-terminal region (residues 1151-1372) is an actin-binding region (ABR) that interacts directly with F-actin and plays an important role in the localization of TJP1 at junctions (PubMed:9792688, PubMed:12354695, PubMed:20930113). The ABR is also required for the localization to puncta at the free edge of cells before initiation of cell-cell contact (PubMed:12354695). The ABR is also necessary for TJP1 recruitment to podosomes (PubMed:20930113).The second PDZ domain (PDZ2) mediates homodimerization and heterodimerization with TJP2 and TJP3 (PubMed:9792688, PubMed:17928286).Belongs to the MAGUK family.
Storage Condition and Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20

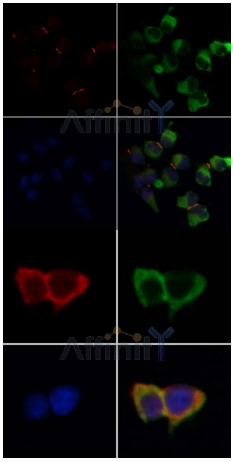
°C.Stable for 12 months from date of receipt.



Western blot analysis of AKT1/2/3 using various lysates Lanes 1 - 2: Merged signal (red and green). Green - AF5145 observed at 195 kDa. Red - loading control, T0023, observed at 55 kDa. Blots were developed with Goat Anti-Rabbit IgG(H+L) FITC–conjugated (S0008) and Goat Anti-Mouse IgG(H+L) Alexa Fluor 594–conjugated (S0005) secondary antibodies



AF5145 at 1/100 staining Human liver cancer tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the Ab for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.



AF5145 staining A2780 by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25°C. Samples were then incubated with primary Ab(AF5145 1:200) and mouse anti-beta tubulin Ab(T0023 1:200) for 1 hour at 37°C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(S0006 1:200 Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(S0017 1:600 Green) were used as the secondary

AF5145 staining Hela by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25°C. Samples were then incubated with primary Ab(AF5145 1:200) and mouse anti-beta tubulin Ab(T0023 1:200) for 1 hour at 37°C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(S0006 1:200 Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(S0017 1:600 Green) were used as the secondary

IMPORTANT: For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.