

Basic Information

Product Name	Anti-14-3-3 Epsilon/YWHAE Antibody (Clone#3G11G2)	
Gene Name	YWHAE	
Source	Mouse	
Clonality	Monoclonal	
Isotype	IgG2b	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, FCM, ICC/IF	
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human YWHAE recombinant protein (Position: M1-Q255).	
Concentration	500 ug/ml	
Purification	protein G purified.	
Observed MW	29 kDa	
Dilution Ratios	Western blot (WB): Immunohistochemistry (IHC): Immunocytochemistry/Immunofluorescence (ICC/IF): Flow Cytometry (Fixed): (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	1:500-2000 1:50-400 1:50-400 1:50-200

Storage

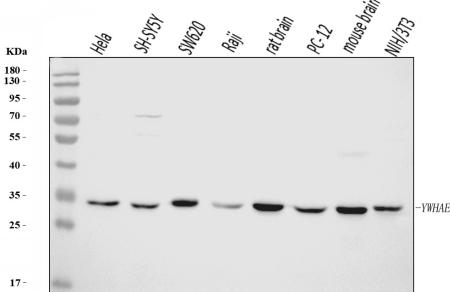
12 months from date of receipt, -20°C as supplied.

Background Information

14-3-3 protein epsilon is a protein that in humans is encoded by the YWHAE gene. This gene product belongs to the 14-3-3 family of proteins which mediate signal transduction by binding to phosphoserine-containing proteins. This highly conserved protein family is found in both plants and mammals, and this protein is 100% identical to the mouse ortholog. It interacts with CDC25 phosphatases, RAF1 and IRS1 proteins, suggesting its role in diverse biochemical activities related to signal transduction, such as cell division and regulation of insulin sensitivity. It has also been implicated in the pathogenesis of small cell lung cancer. Two transcript variants, one protein-coding and the other non-

protein-coding, have been found for this gene.

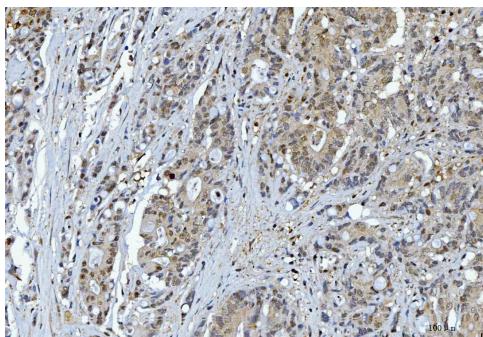
Selected Validation Data



Western blot analysis of 14-3-3 Epsilon/YWHAE using anti-14-3-3 Epsilon/YWHAE antibody (M01687-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

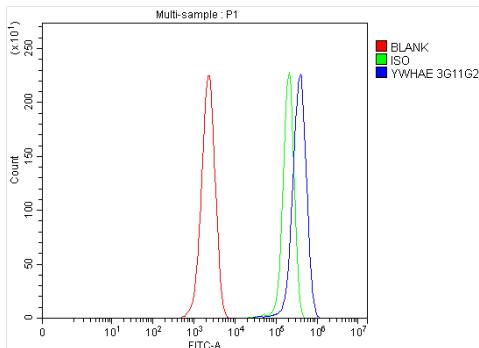
Lane 1: Hela whole cell lysates,
Lane 2: SH-SY5Y whole cell lysates,
Lane 3: SW620 whole cell lysates,
Lane 4: Raji whole cell lysates,
Lane 5: rat brain tissue lysates,
Lane 6: PC-12 whole cell lysates,
Lane 7: mouse brain tissue lysates,
Lane 8: NIH/3T3 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-14-3-3 Epsilon/YWHAE antigen affinity purified monoclonal antibody (M01687-2) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for 14-3-3 Epsilon/YWHAE at approximately 29 kDa. The expected band size for 14-3-3 Epsilon/YWHAE is at 29 kDa.



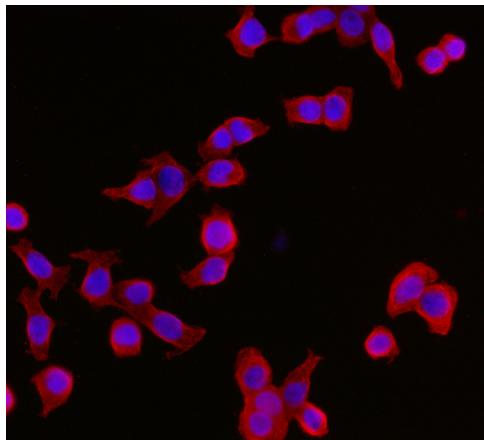
IHC analysis of 14-3-3 Epsilon/YWHAE using anti-14-3-3 Epsilon/YWHAE antibody (M01687-2).

14-3-3 Epsilon/YWHAE was detected in a paraffin-embedded section of human Colorectal adenocarcinoma tissue. Biotinylated goat anti-mouse IgG was used as secondary antibody. The tissue section was incubated with mouse anti-14-3-3 Epsilon/YWHAE Antibody (M01687-2) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of ANA-1 cells using anti-14-3-3 Epsilon/YWHAE antibody (M01687-2).

Overlay histogram showing ANA-1 cells stained with M01687-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-14-3-3 Epsilon/YWHAE Antibody (M01687-2) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



ICC/IF analysis of 14-3-3 Epsilon/YWHAE using anti-14-3-3 Epsilon/YWHAE antibody (M01687-2).

14-3-3 Epsilon/YWHAE was detected in an immunocytochemical section of Caco-2 cells. The section was incubated with mouse anti-14-3-3 Epsilon/YWHAE Antibody (M01687-2) at a dilution of 1:100. Fluoro594-conjugated Anti-mouse IgG Secondary Antibody (red)(Catalog#BA1141) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).