

## Basic Information

<b>Product Name</b>	Anti-14-3-3 Epsilon/YWHAE Antibody (Clone#3G11G2)	
<b>Gene Name</b>	YWHAE	
<b>Source</b>	Mouse	
<b>Clonality</b>	Monoclonal	
<b>Isotype</b>	IgG2b	
<b>Species Reactivity</b>	human,mouse,rat	
<b>Tested Application</b>	WB, IHC, ICC/IF, FCM	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human YWHAE recombinant protein (Position: M1-Q255).	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	protein G purified.	
<b>Observed MW</b>	29 kDa	
<b>Dilution Ratios</b>	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (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.	

## Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

## 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

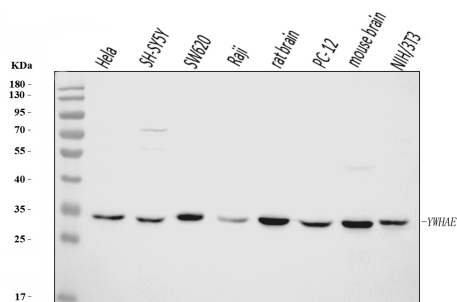


Figure 1. Western blot analysis of anti- YWHAE Antibody

(M01687-2). The sample well of each lane was loaded with 50ug 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.

Use mouse anti- YWHAE 1:1000, probed with a goat anti- mouse IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001). A specific band was detected for YWHAE at approximately 29KD. The expected band size for YWHAE is at 29KD.

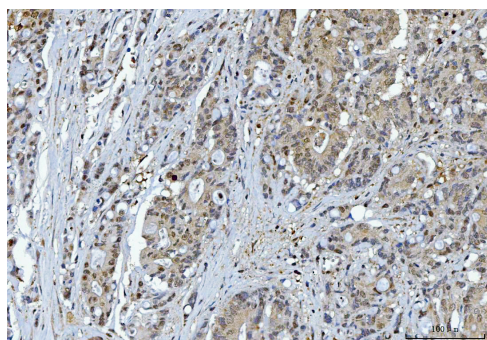


Figure 2. IHC analysis using- YWHAE Antibody (M01687-2). detected in paraffin-embedded section of human Colorectal adenocarcinoma tissue. Biotinylated goat anti-mouse IgG was used as secondary antibody. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

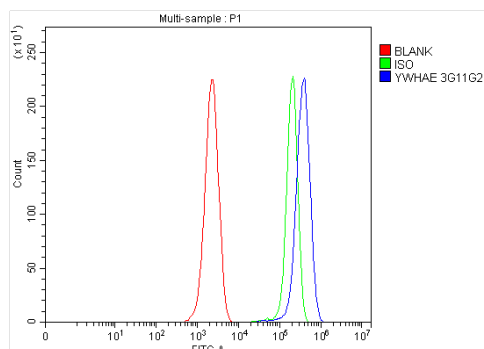


Figure 10. Flow cytometry analysis of ANA-1 cell (1:100) DyLight 488 conjugated goat anti-mouse IgG(blue) was used as secondary antibody. Isotype control antibody (Green line) was mouse IgG DyLight 488. Unlabelled sample (Red line).

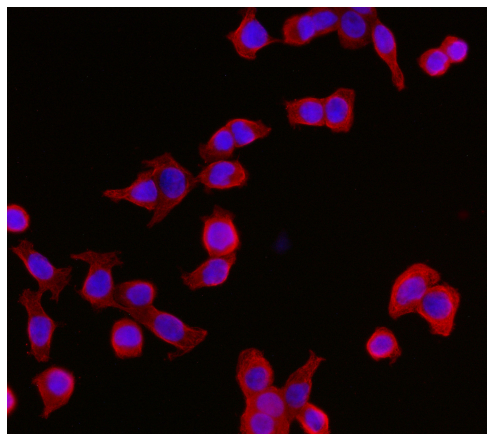


Figure 9. ICC analysis using anti- YWHAE Antibody (M01687-2). was detected in immersion fixed CACO-2 cell. Cells were stained using the Dylight594-conjugated Anti- mouse IgG Secondary Antibody (red)(Catalog # BA1141) and counterstained with DAPI (blue).