

Basic Information

Product Name	Anti-14-3-3 Epsilon/YWHAE Antibody	
Gene Name	YWHAE	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human,mouse,rat	
Tested Application	WB, IHC, ICC/IF, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human YWHAE recombinant protein (Position: M1-Q255).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	29 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA): 1:100-1000 (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

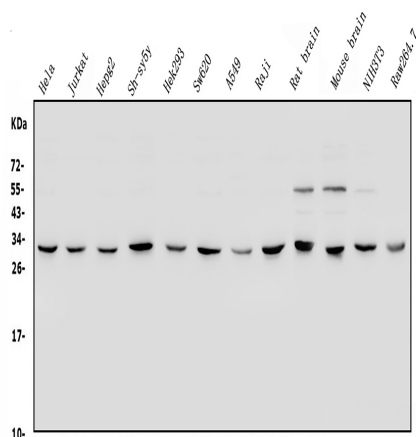


Figure 1. Western blot analysis of anti- YWHAE antibody (A01687-4). The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human hela whole cell lysates, Lane 2: human Jurkat whole cell lysates, Lane 3: human hepg2 whole cell lysates, Lane 4: human SH-SY5Y whole cell lysates, Lane 5: human HEK293 whole cell lysates, Lane 6: human SW620 whole cell lysates, Lane 7: human A549 whole cell lysates, Lane 8: human Raji whole cell lysates, Lane 9: Rat brain tissue lysates, Lane 10: Mouse brain tissue lysates, Lane 11: Mouse NIH/3T3 whole cell lysates, Lane 12: Mouse RAW264.7 whole cell lysates, Use rabbit anti- YWHAE 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for YWHAE at approximately 29KD. The expected band size for YWHAE is at 29KD.

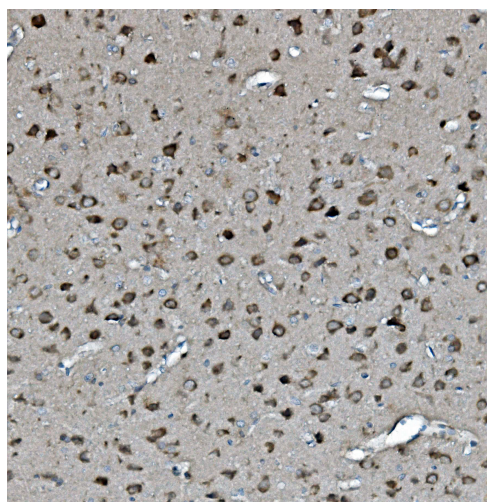


Figure 2. IHC analysis using anti- YWHAE antibody (A01687-4). detected in paraffin-embedded section of rat brain tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

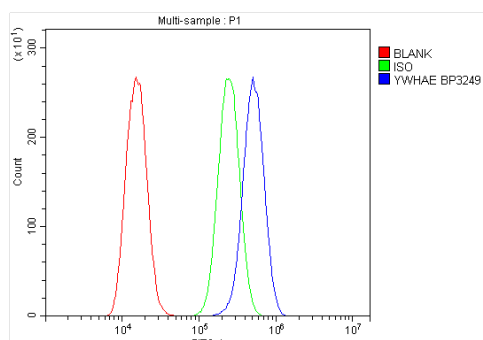


Figure 3. Flow cytometry analysis of A549 cell (1:100) DyLight 488 conjugated goat anti-rabbit IgG(blue) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG DyLight 488. Unlabelled sample (Red line).

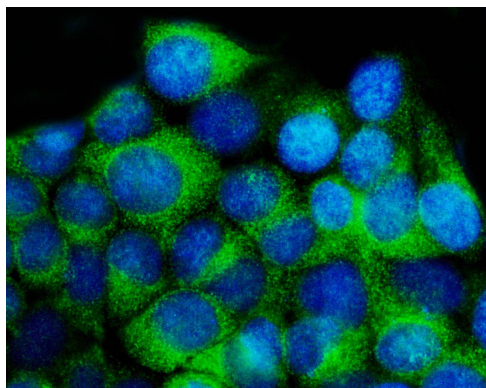


Figure 4. ICC analysis using anti- YWHAE antibody (A01687-4). was detected in immersion fixed MCF-7 cell line. Cells were stained using the Dylight488-conjugated Anti-rabbit IgG Secondary Antibody (green)(Catalog # BA1127) and counterstained with DAPI (blue).