Data Sheet (Cat.No.TMAY-03881)

TargetMol

Anti-14-3-3 beta Antibody (7G975)

Product Details

Ig Type:	Mouse IgG2b
Reactivity:	Cynomolgus
Conjugation:	Unconjugated
Clone:	7G975
Purification:	Protein A

Applications

Verified Activity:	1. Anti-YWHAB mouse monoclonal antibody at 1:500 dilution. -Lane A: Hela Whole Cell Lysate. -Lane B: HepG2 Whole Cell lysate. -Lysates/proteins at 30 µg per lane. -Secondary -Goat Anti-Mouse IgG H&L (Dylight800) at 1/15000 dilution. -Developed using the Odyssey technique. -Performed under reducing conditions. -Predicted band size:28 kDa. -Observed band size:32 kDa. 2. cyno YWHAB was immunoprecipitated using: -Lane A:0.5 mg HepG2 Whole Cell Lysate. -Lane B:0.5 mg Hela Whole Cell Lysate. -2 µL anti-cyno YWHAB mouse monoclonal antibody and 15 µl of 50 % Protein G agarose. -Primary antibody: -Anti-cyno YWHAB mouse monoclonal antibody, at 1:200 dilution. -Secondary antibody: -Dylight 800-labeled antibody to Mouse IgG (H+L), at 1:7500 dilution. -Developed using the odyssey technique. -Performed under reducing conditions. -Predicted band size: 32 kDa. -Observed band size: 32 kDa
Application:	ELISA,IP,WB
Recommended	WB: 1:500-1:2000; ELISA: 1:1000-1:2000; IP: 4-6 µL/mg of lysate

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. Preservative-Free.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	Recombinant Protein: Cynomolgus 14-3-3 beta / YWHAB protein (TMPY-02584)
Antigen Species:	Cynomolgus
Synonyms:	14-3-3 β;tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, β; tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta
Biology Area:	phospho-Serine/phospho-Threonine Binding Proteins, Adaptor Proteins, Apoptosis Adaptor Proteins

Research Background

14-3-3 beta / YWHAB is a member of the 14-3-3 proteins family. 14-3-3 proteins are a group of highly conserved proteins that are involved in many vital cellular processes such as metabolism, protein trafficking, signal transduction, apoptosis and cell cycle regulation. 14-3-3 proteins are mainly localized in the synapses and neuronal cytoplasm, and seven isoforms have been identified in mammals. This family of proteins was initially identified as adaptor proteins which bind to phosphoserine-containing motifs. Binding motifs and potential functions of 14-3-3 proteins are now recognized to have a wide range of functional relevance. 14-3-3 beta / YWHAB is found in both plants and mammals, and this protein is 100% identical to the mouse ortholog. 14-3-3 beta / YWHAB 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. 14-3-3 beta / YWHAB has also been implicated in the pathogenesis of small cell lung cancer. 14-3-3 beta / YWHAB binding negatively regulates RSK1 activity to maintain signal specificity and that association/dissociation of the 14-3-3beta-RSK1 complex is likely to be important for mitogen-mediated RSK1 activation.