

YES1 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1155a

Specification

YES1 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype **Description** WB, ICC, IF <u>P07947</u> Human Mouse Monoclonal IgG1

YES1, v-yes-1 Yamaguchi sarcoma viral oncogene homolog 1. This gene is the cellular homolog of the Yamaguchi sarcoma virus oncogene. The encoded protein has tyrosine kinase activity and belongs to the src family of proteins. This gene lies in close proximity to thymidylate synthase gene on chromosome 18, and a corresponding pseudogene has been found on chromosome 22.

Immunogen Purified recombinant fragment of YES (aa10-193) expressed in E. Coli.

Formulation Ascitic fluid containing 0.03% sodium azide.

YES1 Antibody - Additional Information

Gene ID 7525

Other Names Tyrosine-protein kinase Yes, 2.7.10.2, Proto-oncogene c-Yes, p61-Yes, YES1, YES

Dilution WB~~1/500 - 1/2000 ICC~~1:200~~1000 IF~~1:200~1000.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions YES1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

YES1 Antibody - Protein Information

Name YES1



Synonyms YES

Function

Non-receptor protein tyrosine kinase that is involved in the regulation of cell growth and survival, apoptosis, cell-cell adhesion, cytoskeleton remodeling, and differentiation. Stimulation by receptor tyrosine kinases (RTKs) including EGFR, PDGFR, CSF1R and FGFR leads to recruitment of YES1 to the phosphorylated receptor, and activation and phosphorylation of downstream substrates. Upon EGFR activation, promotes the phosphorylation of PARD3 to favor epithelial tight junction assembly. Participates in the phosphorylation of specific junctional components such as CTNND1 by stimulating the FYN and FER tyrosine kinases at cell-cell contacts. Upon T-cell stimulation by CXCL12, phosphorylates collapsin response mediator protein 2/DPYSL2 and induces T-cell migration. Participates in CD95L/FASLG signaling pathway and mediates AKT-mediated cell migration. Plays a role in cell cycle progression by phosphorylating the cyclin-dependent kinase 4/CDK4 thus regulating the G1 phase. Also involved in G2/M progression and cytokinesis. Catalyzes phosphorylation of organic cation transporter OCT2 which induces its transport activity (PubMed:http://www.uniprot.org/citations/26979622

Cellular Location

Cell membrane. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytosol. Cell junction {ECO:0000250|UniProtKB:Q28923}. Note=Newly synthesized protein initially accumulates in the Golgi region and traffics to the plasma membrane through the exocytic pathway. Localized to small puncta throughout the cytoplasm and cell membrane when in the presence of SNAIL1 (By similarity). {ECO:0000250|UniProtKB:Q28923}

Tissue Location

Expressed in the epithelial cells of renal proximal tubules and stomach as well as hematopoietic cells in the bone marrow and spleen in the fetal tissues. In adult, expressed in epithelial cells of the renal proximal tubules and present in keratinocytes in the basal epidermal layer of epidermis.

YES1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

YES1 Antibody - Images



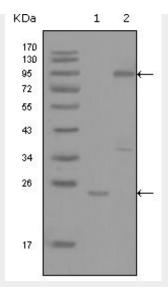


Figure 1: Western blot analysis using YES1 mouse mAb against truncated YES1-His recombinant protein (1) and full-length GFP-YES1(aa1-543) transfected COS7 cell lysate (2).

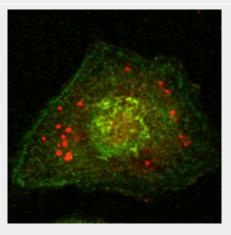


Figure 2: Confocal immunofluorescence analysis of Hela cells using Calnexin mouse mAb (green).

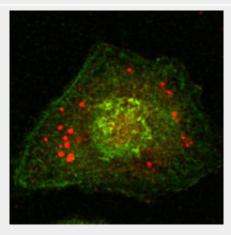


Figure 2: Confocal immunofluorescence analysis of Hela cells using anti-Calnexin mAb (green). YES1 Antibody - References

1. J Biol Chem. 2004 Jun 4;279(23):23977-87. 2. J Biol Chem. 2004 Jul 23;279(30):31590-8. 3. Nat Biotechnol. 2005 Jan;23(1):94-101.