

YES1 Antibody

Purified Mouse Monoclonal Antibody (Mab) Catalog # AM8517b

Specification

YES1 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB,E <u>P07947</u> Human Mouse monoclonal IgG1,k 60801

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

Target/Specificity

This YES1 antibody is generated from a mouse immunized with a recombinant protein of human YES1.

Dilution WB~~1:4000

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. 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: 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

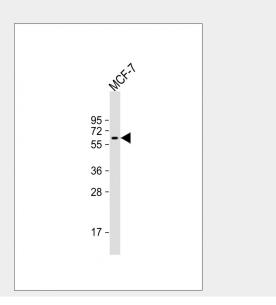
Expressed in the epithelial cells of renal proximal tubules and stomach as well as hematopoietic cells in the bone marrow and spleen in the fetal tissues. In adult, expressed in epithelial cells of the renal proximal tubules and present in keratinocytes in the basal epidermal layer of epidermis.

YES1 Antibody - Protocols

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

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

YES1 Antibody - Images





Anti-YES1 Antibody at 1:4000 dilution + MCF-7 whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 61 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

YES1 Antibody - Background

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 EGRF, 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.

YES1 Antibody - References

Sukegawa J., et al.Mol. Cell. Biol. 7:41-47(1987). Nusbaum C., et al.Nature 437:551-555(2005). Mural R.J., et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Sugawara K., et al.Br. J. Cancer 63:508-513(1991). Krueger J., et al.Oncogene 6:933-940(1991).