

YES1 / c-Yes Antibody

Rabbit Polyclonal Antibody Catalog # ALS13231

Specification

YES1 / c-Yes Antibody - Product Information

Application IF, WB, IHC
Primary Accession P07947
Reactivity Human, Mouse
Host Rabbit
Clonality Polyclonal
Calculated MW 61kDa KDa

YES1 / c-Yes 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

Human and mouse c-Yes. Predicted cross-reactivity based on amino acid sequence homology: rat (88%), bovine (89%), dogs (98%), zebrafish (95%).

Reconstitution & Storage

Aliquot and store at -20°C. Minimize freezing and thawing.

Precautions

YES1 / c-Yes Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

YES1 / c-Yes 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.

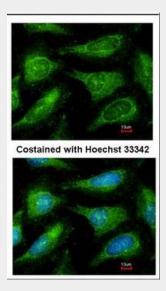
Volume 50 µl

YES1 / c-Yes Antibody - Protocols

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

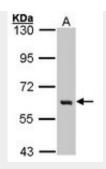
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

YES1 / c-Yes Antibody - Images

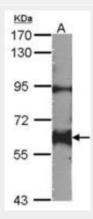


Immunofluorescence of methanol-fixed HeLa, using c-Yes antibody at 1:200 dilution.

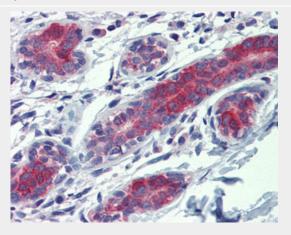




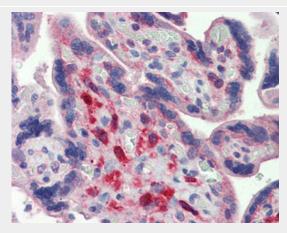
Sample (30 ug of whole cell lysate). A: A431. 7.5% SDS PAGE. YES1 antibody diluted at 1:1000.



Sample (30 ug of whole cell lysate). A: NIH-3T3. 7.5% SDS PAGE. YES1 antibody diluted at 1:1000.



Anti-YES1 antibody IHC of human breast.



Anti-YES1 antibody IHC of human placenta.



YES1 / c-Yes 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 / c-Yes 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).