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YES1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7725A

Product Information

Application	IHC-P, WB, E
Primary Accession	P07947
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB3091
Calculated MW	60801
Antigen Region	1-30

Additional Information

Gene ID	7525
Other Names	Tyrosine-protein kinase Yes, Proto-oncogene c-Yes, p61-Yes, YES1, YES
Target/Specificity	This YES1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human YES1.
Dilution	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation 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 (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

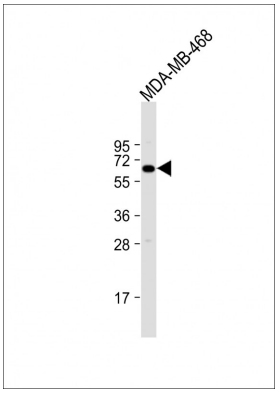
Background

YES is a member of the Src family of non-receptor tyrosine kinases participating in a wide range of cellular signalling pathways. The gene that encodes YES is the cellular homolog of the Yamaguchi sarcoma virus oncogene. This gene lies in proximity to thymidylate synthase gene on chromosome 18, and a pseudogene of it has mapped to chromosome 22.

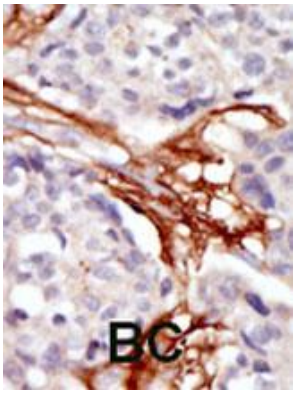
References

Oh, H.S., et al., J. Biol. Chem. 277(39):36489-36498 (2002).
Leclerc, P., et al., Biol. Reprod. 67(1):301-307 (2002).
Silverman, G.A., et al., Genomics 15(2):442-445 (1993).
Brickell, P.M., Crit Rev Oncog 3(4):401-446 (1992).
Sukegawa, J., et al., Mol. Cell. Biol. 7(1):41-47 (1987).

Images



Anti-YES Antibody (K11) at 1:1000 dilution + MDA-MB-468 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 61 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.