

Product datasheet

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ARG44771 anti-YES1 antibody

Package: 50 μg Store at: -20°C

Summary

Product Description Mouse Monoclonal antibody recognizes YES1

Tested Reactivity Hu

Tested Application IHC-P, IP, WB

Host Mouse

Clonality Monoclonal

Isotype IgG1

Target Name YES1

Species Human

Conjugation Un-conjugated

Alternate Names HsT441; Proto-oncogene c-Yes; Tyrosine-protein kinase Yes; c-yes; Yes; P61-YES; p61-Yes; EC 2.7.10.2

Application Instructions

| Application table | Application | Dilution |
|-------------------|--|------------|
| | IHC-P | 5-10 μg/mL |
| | IP | 10 μg/mL |
| | WB | 1 μg/mL |
| Application Note | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. | |

Properties

Form Liquid

Purification Protein A purification

Buffer PBS with 0.09% sodium azide

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

| Gene Symbol | YES1 |
|----------------|--|
| Gene Full Name | YES proto-oncogene 1, Src family tyrosine kinase |

Background

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. [provided by RefSeq, Jul 2008]

Function

Multi-functional protein which regulates not only caspases and apoptosis, but also modulates inflammatory signaling and immunity, copper homeostasis, mitogenic kinase signaling, cell proliferation, as well as cell invasion and metastasis. Acts as a direct caspase inhibitor. Directly bind to the active site pocket of CASP3 and CASP7 and obstructs substrate entry. Inactivates CASP9 by keeping it in a monomeric, inactive state. Acts as an E3 ubiquitin-protein ligase regulating NF-kappa-B signaling and the target proteins for its E3 ubiquitin-protein ligase activity include: RIPK1, CASP3, CASP7, CASP8, CASP9, MAP3K2/MEKK2, DIABLO/SMAC, AIFM1, CCS and BIRC5/survivin. Ubiquitinion of CCS leads to enhancement of its chaperone activity toward its physiologic target, SOD1, rather than proteasomal degradation. Ubiquitinion of MAP3K2/MEKK2 and AIFM1 does not lead to proteasomal degradation. Plays a role in copper homeostasis by ubiquitinationg COMMD1 and promoting its proteasomal degradation. Can also function as E3 ubiquitin-protein ligase of the NEDD8 conjugation pathway, targeting effector caspases for neddylation and inactivation. Regulates the BMP signaling pathway and the SMAD and MAP3K7/TAK1 dependent pathways leading to NF-kappa-B and JNK activation. Acts as an important regulator of innate immune signaling via regulation of Nodlike receptors (NLRs). Protects cells from spontaneous formation of the ripoptosome, a large multi-protein complex that has the capability to kill cancer cells in a caspase-dependent and caspase-independent manner. Suppresses ripoptosome formation by ubiquitinating RIPK1 and CASP8. Acts as a positive regulator of Wnt signaling and ubiquitinates TLE1, TLE2, TLE3, TLE4 and AES. Ubiquitination of TLE3 results in inhibition of its interaction with TCF7L2/TCF4 thereby allowing efficient recruitment and binding of the transcriptional coactivator beta-catenin to TCF7L2/TCF4 that is required to initiate a Wnt-specific transcriptional program. [UniProt]

PTM

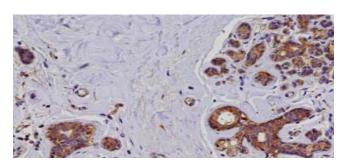
Phosphorylation by CSK on the C-terminal tail maintains the enzyme in an inactive state. Autophosphorylation at Tyr-426 maintains enzyme activity by blocking CSK-mediated inhibition.

Palmitoylation at Cys-3 promotes membrane localization. [UniProt]

Cellular Localization

Cell membrane. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytosol. Note=Newly synthesized protein initially accumulates in the Golgi region and traffics to the plasma membrane through the exocytic pathway. [UniProt]

Images



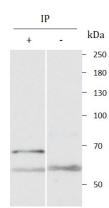
ARG44771 anti-YES1 antibody IHC-P image

Immunohistochemistry: Human mammary gland stained with ARG44771 anti-YES1 antibody at 5 $\mu g/mL$ dilution.



ARG44771 anti-YES1 antibody WB image

Western blot: HepG2 stained with ARG44771 anti-YES1 antibody at 1 $\,\mu\text{g}/\text{mL}$ dilution.



ARG44771 anti-YES1 antibody IP image

Immunoprecipitation: HepG2 lysate immunoprecipitated with 2.5 μg of ARG44771 anti-YES1 antibody.