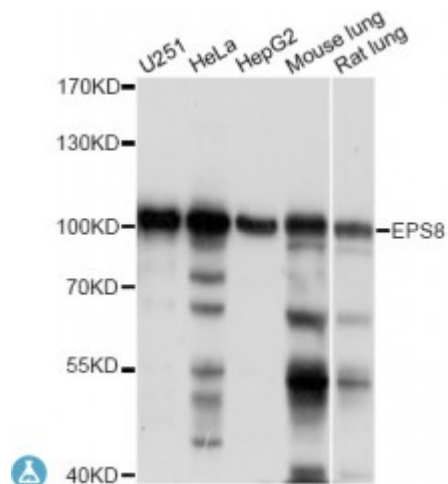


Anti-EPS8 Antibody



Description

This gene encodes a member of the EPS8 family. This protein contains one PH domain and one SH3 domain. It functions as part of the EGFR pathway, though its exact role has not been determined. Highly similar proteins in other organisms are involved in the transduction of signals from Ras to Rac and growth factor-mediated actin remodeling. Alternate transcriptional splice variants of this gene have been observed but have not been thoroughly characterized.

Model	STJ116930
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 1-200 of human EPS8 (NP_004438.3).
Gene ID	2059
Gene Symbol	EPS8
Dilution range	WB 1:500 - 1:2000
Tissue Specificity	Expressed in all tissues analyzed, including heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas, Expressed in all epithelial and fibroblastic lines examined and in some, but not all, hematopoietic cells
Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Epidermal growth factor receptor kinase substrate 8

Molecular Weight	91.882 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:34200 MIM:600206
Alternative Names	Epidermal growth factor receptor kinase substrate 8
Function	Signaling adapter that controls various cellular protrusions by regulating actin cytoskeleton dynamics and architecture, Depending on its association with other signal transducers, can regulate different processes, Together with SOS1 and ABI1, forms a trimeric complex that participates in transduction of signals from Ras to Rac by activating the Rac-specific guanine nucleotide exchange factor (GEF) activity, Acts as a direct regulator of actin dynamics by binding actin filaments and has both barbed-end actin filament capping and actin bundling activities depending on the context, Displays barbed-end actin capping activity when associated with ABI1, thereby regulating actin-based motility process: capping activity is auto-inhibited and inhibition is relieved upon ABI1 interaction, Also shows actin bundling activity when associated with BAIAP2, enhancing BAIAP2-dependent membrane extensions and promoting filopodial protrusions, Involved in the regulation of processes such as axonal filopodia growth, stereocilia length, dendritic cell migration and cancer cell migration and invasion, Acts as a regulator of axonal filopodia formation in neurons: in the absence of neurotrophic factors, negatively regulates axonal filopodia formation via actin-capping activity, In contrast, it is phosphorylated in the presence of BDNF leading to inhibition of its actin-capping activity and stimulation of filopodia formation, Component of a complex with WHRN and MYO15A that localizes at stereocilia tips and is required for elongation of the stereocilia actin core, Indirectly involved in cell cycle progression
Cellular Localization	Cytoplasm, cell cortex,
Post-translational Modifications	Ubiquitinated by the SCF(FBXW5) E3 ubiquitin-protein ligase complex during G2 phase, leading to its transient degradation and subsequent cell shape changes required to allow mitotic progression, Reappears at the midzone of dividing cells ,