phospho Vav1 [pY160]. Rabbit Phosphorylation Site-Specific Antibody , Human

Background

Vav proteins belong to the guanidine nucleotide exchange factor family of proteins. These proteins couple receptors to Rho-GTPases. To date, three members of the Vav family have been identified in mammalian cells: Vav1, Vav2, and Vav3. Vav1 contains multiple protein binding motifs, indicating a role for Vav1 as an adaptor protein linking cell surface receptors to downstream signaling proteins. Vav1 is exclusively expressed in hematopoietic cells and plays a significant role in lymphocyte development and antigen receptor mediated activation of NFAT and NFκB, and in more delayed responses such as the production of cytokines, including IL-2, IL-3, IFN-γ and TNF-α. Vav1 is also reported to activate JNK, p21-activated kinase (PAK) and PLCγ, implicating its critical role in calcium mobilization, and cytoskeletal rearrangement. Activation of several cell surface receptors including integrins, immune response receptors, or growth factor receptors leads to phosphorylation of Vav1 on tyrosine residues including tyrosine 160.

Ordering Information

Catalog Number
X2031P

Size
10 Miniblots

Form
Unconjugated

Host/Clone
Rabbit

Formulation
Provided as solution in phosphate buffered saline, pH 7.3, with 1.0 mg/ml BSA and 0.05% sodium azide

Concentration
Lot specific, see vial

Isotype
IgG

Applications
Western Blot

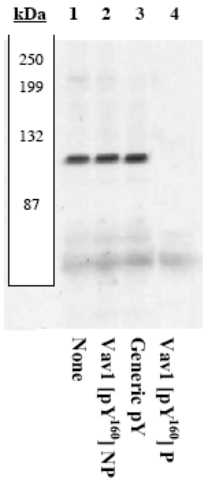
Species Reactivity

Human

Immunogen

Synthetic phosphopeptide derived from the human Vav1 protein which contains Y160. Immunogen sequence is conserved in mouse and rat.

Legend:
Western blot analysis using Vav1 [pY160] antibody on K562 cell lysate. Antibody activity was blocked by incubation of primary antibody with no peptide (1), non-phosphorylated immunogen peptide (2), general phosphotyrosine containing peptide (3) and phosphorylated immunogen peptide (4).



POSITIVE CONTROL/TISSUE EXPRESSION

K562 cells expressing wild-type Intergrin α_v and β3 proteins.

COMMENTS

Antibody can be used for Western blotting (1:1000 dilution). Optimal concentration should be evaluated by serial dilutions.

SHIP CONDITIONS

Ship on dry ice, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -70ºC. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

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4. Bustelo, X.R. (2001) Vav proteins, adaptors and cell signaling. Oncogene 20(44):6372-6381.

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