

# Rabbit Anti-phospho-VAV1 (Tyr174) antibody

SL5594R

| Product Name:          | phospho-VAV1 (Tyr174)   |
|------------------------|---|
| Chinese Name:          | 磷酸化鸟苷酸转换因子VAV1抗体  |
| Alias:                 | VAV1(phospho Y174); Oncogene vav; p95Vav; Protooncogene vav; Proto-oncogene<br>vav; VAV 1; VAV 1 oncogene; VAV; Vav proto oncogene; Vav proto-oncogene;<br>VAV_HUMAN; VAV1.   |
| Organism Species:      | Rabbit  |
| Clonality:             | Polyclonal  |
| React Species:         | Human, Mouse, Rat, Dog, Pig, Horse,   |
| Applications:          | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-  |
|                        | 500 (Paraffin sections need antigen repair)   |
|                        | not yet tested in other applications.   |
|                        | optimal dilutions/concentrations should be determined by the end user.  |
| Molecular weight:      | 98kDa   |
| Cellular localization: | cytoplasmicThe cell membrane  |
| Form:                  | Lyophilized or Liquid   |
| Concentration:         | 1mg/ml  |
| immunogen:             | KLH conjugated Synthesised phosphopeptide derived from human VAV1 around the phosphorylation site of Tyr174:EI(p-Y)ED   |
| Lsotype:               | IgG   |
| Purification:          | affinity purified by Protein A  |
| Storage Buffer:        | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.  |
| Storage:               | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |
| PubMed:                | PubMed  |
| Product Detail:        | This gene is a member of the VAV gene family. The VAV proteins are guanine nucleotide exchange factors (GEFs) for Rho family GTPases that activate pathways leading to actin cytoskeletal rearrangements and transcriptional alterations. The   |

encoded protein is important in hematopoiesis, playing a role in T-cell and B-cell development and activation. The encoded protein has been identified as the specific binding partner of Nef proteins from HIV-1. Coexpression and binding of these partners initiates profound morphological changes, cytoskeletal rearrangements and the JNK/SAPK signaling cascade, leading to increased levels of viral transcription and replication. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Apr 2012].

#### Function:

Couples tyrosine kinase signals with the activation of the Rho/Rac GTPases, thus leading to cell differentiation and/or proliferation.

## Subunit:

May interact with CCPG1. Interacts with APS, DOCK2, GRB2, GRB3, DOCK2, SLA, TEC and ZNF655/VIK. Interacts with SIAH2; without leading to its degradation. Associates with BLNK, PLCG1, GRB2 and NCK1 in a B-cell antigen receptor-dependent fashion. Interacts with CBLB; which inhibits tyrosine phosphorylation and down-regulates activity. Interacts with SHB and CLNK. Interacts with THEMIS2. Interacts with HCK. Interacts with NEK3 and this interaction is prolactin-dependent. Interacts with ITK. Interacts with PTK2B/PYK2. Interacts (via SH2 domain) with SYK. Interacts with ANKRD54.

#### **Tissue Specificity:**

Widely expressed in hematopoietic cells but not in other cell types.

## Post-translational modifications:

Phosphorylated on tyrosine residues by HCK in response to IFNG and bacterial lipopolysaccharide (LPS). Phosphorylated by FYN.

## Similarity:

Contains 1 CH (calponin-homology) domain. Contains 1 DH (DBL-homology) domain. Contains 1 PH domain. Contains 1 phorbol-ester/DAG-type zinc finger. Contains 1 SH2 domain. Contains 2 SH3 domains.

#### SWISS: P15498

Gene ID: 7409

## Database links:

Entrez Gene: 7409 Human

Entrez Gene: 22324 Mouse

Entrez Gene: 25156 Rat

Omim: 164875 Human

SwissProt: P15498 Human

SwissProt: P27870 Mouse

SwissProt: P54100 Rat

Unigene: 116237 Human

Unigene: 248172 Mouse

Unigene: 48861 Rat

**Important Note:** 

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Vav1蛋白是特异于造血细胞表达的鸟苷酸转换因子,它参与了多种免疫细胞如T细胞,B细胞,巨噬细胞,自然杀伤性细胞等的胞内Signal transduction,发挥着重要作用. Vav1主要参与T细胞信号传导途径,传导信号激活钙流、细胞外信号调节激酶(ER K)以及转录因子NFκB。Vav1蛋白在T细胞生长发育、成熟T细胞激活、cell factor合成及Cytoskeleton活动中发挥重要作用。

cn.con