



Qty: 0.5 mL

Mouse anti-Vav1

Catalog No. 39-2050

Lot No.

## Mouse anti-Vav1

### FORM

This monoclonal antibody is supplied as a 0.5 mL aliquot of tissue culture supernatant containing 0.1% sodium azide.

**CLONE:** ZV003

**ISOTYPE:** Mouse IgG<sub>1</sub>-kappa

### IMMUNOGEN

Synthetic peptide derived from an internal region of the human, mouse and rat Vav1 proteins

### SPECIFICITY

This antibody is specific for the Vav1 protein. On Western blots, it identifies the target band at ~100 kDa.

### REACTIVITY

Reactivity has been confirmed with human Jurkat cell lysates. Based on 100% amino acid sequence identity, reactivity with mouse and rat is expected.

Sample	ELISA	Western Blotting
Human	ND	+++
Mouse	ND	ND
Rat	ND	ND
Immunogen	+++	+++

(Excellent +++, Good++, Poor +, No reactivity 0, Not applicable N/A, Not Determined ND)

### USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

**ELISA:** 1:100 - 1:1000

**Western Blotting:** 1:200 - 1:1000

### STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long-term storage. Avoid repeated freezing and thawing.

(cont'd)

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**BACKGROUND**

Vav1, the protein product of the *Vav1* protooncogene, is a key cytoplasmic protein in the activation of resting T cells via integrated signals delivered through the T-cell antigen receptor (TCR). It is one of three members of the Dbl superfamily of Rav/Rho-specific guanine nucleotide exchange factors (GEFs).<sup>1</sup> Whereas Vav2 and Vav3 are widely expressed in mammalian tissues, Vav1 is restricted to hematopoietic and trophoblastic cells.<sup>1</sup> Along with playing a role in the normal maturation and activation of B and T cells, Vav1 also forms part of the signaling pathways required for natural and antibody dependant cellular cytotoxicity (ADCC) of human NK cells.<sup>2</sup>

Vav1 has also been identified as the specific binding partner of Nef proteins in HIV-1.<sup>3</sup> Coexpression and binding of Vav1 and Nef initiates profound morphological changes and cytoskeletal rearrangements in the infected cell, leading to increased levels of viral transcription and replication.<sup>3</sup>

**REFERENCES**

1. Bustelo XR. *Mol Cell Biol* 20:1461-1477, 2000.
2. Chan G, et al. *Eur J Immunol* 31(8):2403-2410, 2004.
3. Fackler OT, et al. *Mol Cell* 3(6):729-739, 1999.

**RELATED PRODUCTS**

<b>Product</b>	<b>Conjugate</b>	<b>Cat. No.</b>
Protein A	Sepharose® 4B	10-1041
rec-Protein G	Sepharose® 4B	10-1241

<b>Conjugate</b>	<b>ZyMAX™ Goat x Rabbit IgG (H+L)</b>	<b>ZyMAX™ Goat x Mouse IgG (H+L)</b>
Purified	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Cy™3	81-6115	81-6515
Cy™5	81-6116	81-6516
HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

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