

**HEM1 Antibody (internal region)**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF2836a****Specification**

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**HEM1 Antibody (internal region) - Product Information**

Application	E
Primary Accession	<a href="#">P55160</a>
Other Accession	<a href="#">NP_005328.2</a> , <a href="#">3071</a> , <a href="#">105855 (mouse)</a> , <a href="#">315348 (rat)</a>
Predicted Host	Human, Mouse, Rat, Dog, Horse
Clonality	Goat
Concentration	Polyclonal
Isotype	0.5 mg/ml
Calculated MW	IgG
	128153

**HEM1 Antibody (internal region) - Additional Information****Gene ID** 3071**Other Names**

Nck-associated protein 1-like, Hematopoietic protein 1, Membrane-associated protein HEM-1, NCKAP1L, HEM1

**Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

HEM1 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

**HEM1 Antibody (internal region) - Protein Information****Name** NCKAP1L ([HGNC:4862](#))**Function**

Essential hematopoietic-specific regulator of the actin cytoskeleton (Probable). Controls lymphocyte development, activation, proliferation and homeostasis, erythrocyte membrane stability, as well as phagocytosis and migration by neutrophils and macrophages (PubMed:&lt;a href="http://www.uniprot.org/citations/16417406" target="\_blank"&gt;16417406&lt;/a&gt;, PubMed:&lt;a href="http://www.uniprot.org/citations/17696648" target="\_blank"&gt;17696648&lt;/a&gt;). Component of the WAVE2 complex which signals downstream of RAC to stimulate F-actin polymerization.

Required for stabilization and/or translation of the WAVE2 complex proteins in hematopoietic cells (By similarity). Within the WAVE2 complex, enables the cortical actin network to restrain excessive degranulation and granule release by T-cells (PubMed:<a href="http://www.uniprot.org/citations/32647003" target="\_blank">32647003</a>). Required for efficient T-lymphocyte and neutrophil migration (PubMed:<a href="http://www.uniprot.org/citations/32647003" target="\_blank">32647003</a>). Exhibits complex cycles of activation and inhibition to generate waves of propagating the assembly with actin (PubMed:<a href="http://www.uniprot.org/citations/16417406" target="\_blank">16417406</a>). Also involved in mechanisms WAVE-independent to regulate myosin and actin polymerization during neutrophil chemotaxis (PubMed:<a href="http://www.uniprot.org/citations/17696648" target="\_blank">17696648</a>). In T-cells, required for proper mechanistic target of rapamycin complex 2 (mTORC2)-dependent AKT phosphorylation, cell proliferation and cytokine secretion, including that of IL2 and TNF (PubMed:<a href="http://www.uniprot.org/citations/32647003" target="\_blank">32647003</a>).

#### **Cellular Location**

Cell membrane; Single-pass membrane protein; Cytoplasmic side. Cytoplasm. Note=Localizes to the leading edge of polarized neutrophils

#### **Tissue Location**

Expressed only in cells of hematopoietic origin (PubMed:7643388, PubMed:1932118). Expressed in neutrophils (at protein level) (PubMed:16417406). Expressed in T-cells (at protein level) (PubMed:32647003).

### **HEM1 Antibody (internal region) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **HEM1 Antibody (internal region) - Images**

### **HEM1 Antibody (internal region) - References**

Hem-1 complexes are essential for Rac activation, actin polymerization, and myosin regulation during neutrophil chemotaxis. Weiner OD, Rentel MC, Ott A, Brown GE, Jedrychowski M, Yaffe MB, Gygi SP, Cantley LC, Bourne HR, Kirschner MW. PLoS Biol. 2006 Feb;4(2):e38. Epub 2006 Jan 24. PMID: 16417406