10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

HEM1 Antibody (internal region)

Peptide-affinity purified goat antibody
Catalog # AF2836a

Specification

HEM1 Antibody (internal region) - Product Information

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

Dilution
E~~N/A

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:<a

href="http://www.uniprot.org/citations/16417406" target="_blank">16417406, PubMed:17696648). 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:32647003). Required for efficient T-lymphocyte and neutrophil migration (PubMed:32647003). Exhibits complex cycles of activation and inhibition to generate waves of propagating the assembly with actin (PubMed:16417406). Also involved in mechanisms WAVE-independent to regulate myosin and actin polymerization during neutrophil chemotaxis (PubMed:17696648). 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:32647003).

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:1932118, PubMed:7643388). 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 Cytomety
- 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