

Product datasheet for **AP23709PU-N**

alpha Defensin 1 (DEFA1) (+Defensin alpha 3) Goat Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IHC, WB
Recommended Dilution:	Peptide ELISA: 1/128000 (Detection Limit). Western blot: 1-3 µg/ml. Detects a band of Approx 10kDa band observed in Human Spleen lysates (calculated MW of 10.2kDa according to NP_004075.1). An additional band of unknown identity was also consistently observed at 20kDa. This band was successfully blocked by incubation with the immunizing peptide. We would appreciate any feedback from people in the field - have any such results been reported with other antibodies/lysates? Have any further splice variants/modified forms been reported? Immunohistochemistry on Paraffin Sections: 3-6 µg/ml in paraffin embedded Human Thymus.
Reactivity:	Human
Host:	Goat
Clonality:	Polyclonal
Immunogen:	Peptide with sequence from the internal region of the protein sequence according to NP_004075.1; NP_005208.1.
Specificity:	This antibody is expected to equally recognize DEFA1 precursor and DEFA3 precursor.
Formulation:	Tris saline, pH 7.3 containing 0.02% Sodium Azide as preservative and 0.5% BSA as stabilizer. State: Aff - Purified State: Liquid purified IgG fraction.
Concentration:	lot specific
Purification:	Ammonium Sulphate Precipitation followed by Antigen Affinity Chromatography using the immunizing peptide.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	defensin alpha 1



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Database Link: [Entrez Gene 728358 Human](#)[Entrez Gene 1667 Human](#)
[P59665](#)

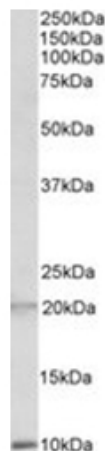
Background: Defensins are a family of microbicidal and cytotoxic peptides thought to be involved in host defense. They are abundant in the granules of neutrophils and also found in the epithelia of mucosal surfaces such as those of the intestine, respiratory tract, urinary tract, and vagina. Members of the defensin family are highly similar in protein sequence and distinguished by a conserved cysteine motif. Several alpha defensin genes appear to be clustered on chromosome 8. The protein encoded by this gene, defensin, alpha 1, is found in the microbicidal granules of neutrophils and likely plays a role in phagocyte-mediated host defense. It differs from defensin, alpha 3 by only one amino acid.

Biological Functions: Various functions have been described for defensins. They are antibacterial, antifungal, chemotactic for monocytes, inhibitory for ACTH-induced corticosteroid synthesis and cytotoxic for cells. Defensins are inhibited by glucosaminoglycans (self protection for cells) and high concentrations of Ca²⁺ ions.

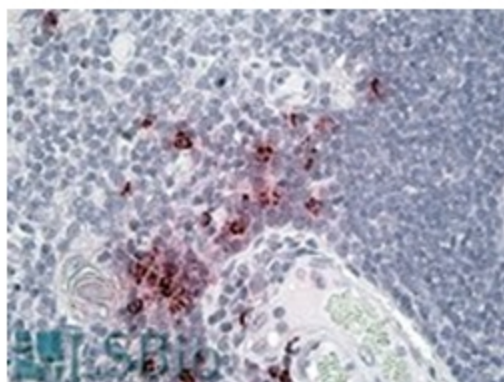
Synonyms: Neutrophil defensin 1, HNP-1, DEFA1, DEF1, DEFA2, MRS

Protein Families: Druggable Genome

Product images:



DEFA1/3 antibody staining of Human Spleen lysate at 2 ug/ml (35ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



DEFA1/3 antibody staining of paraffin embedded Human Thymus at 3.8 ug/ml. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.