Human CAMP/LL37/FALL39 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG

Catalog Number: AF7497

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CAMP/LL37/FALL39 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human CAMP/LL37/FALL39 Leu134-Ser170 Accession # P49913
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

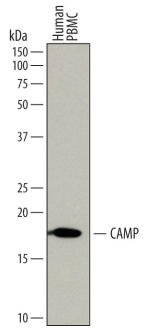
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below

DATA

Western Blot



Detection of Human CAMP/LL37/FALL39 by Western Blot. Western blot shows lysates of human peripheral blood mononuclear cells (PBMC). PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human CAMP/LL37/FALL39 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7497) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for CAMP at approximately 18 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

CAMP (Cathelicidin AntiMicrobial Peptide; also18 kDa cationic antimicrobial protein, CAP18, LL37, FALL39 and HSD26) is a member of the cathelicidin family of proteins. It is widely expressed, being found associated with neutrophils, bronchial epithelium, renal tubule epithelium, activated keratinocytes, γδ T cells, monocytes, NK cells, colonic epithelium and the stratum basale of nonkeratinized epithelium found in the vagina and oral cavity. CAMP has marked antimicrobial activity against both Gm+ and Gm- bacteria, and acts as a chemoattractant for neutrophils, monocytes and mast cells. CAMP is synthesized as 170 amino acid (aa) preproprecursor. It contains a 30 aa signal sequence, a 103 aa, 14 kDa prosegment (aa 31-131), and a 4-5 kDa, 37 aa (aa 134-170) C-terminal mature fragment (LL37) or 39 aa (aa 132-170) C-terminal mature fragment (FALL39). In neutrophils, the 18-19 kDa proprecursor is stored in granules, where, upon activation, it is enzymatically cleaved and released. While both the prosegment and C-terminal fragments possess antimicrobial activity, the prosegment also shows antiprotease activity, while the C-terminal fragment also shows chemotactic activity. The prosegment may form homodimers, while the C-terminal fragment (LL37) is reported to form homotetramers. Over aa 141-170, human CAMP shares only 50% and 57% aa sequence identity with mouse and rat CAMP, respectively.