

**DESCRIPTION**

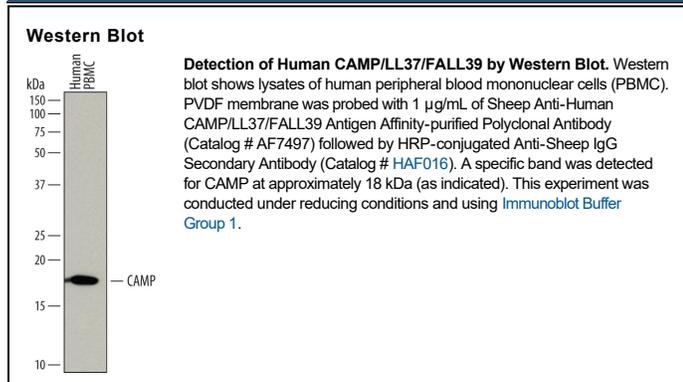
|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Human   |
| <b>Specificity</b>        | Detects human CAMP/LL37/FALL39 in direct ELISAs and Western blots.  |
| <b>Source</b>             | Polyclonal Sheep IgG  |
| <b>Purification</b>       | Antigen Affinity-purified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

|                     | <b>Recommended Concentration</b> | <b>Sample</b> |
|---------------------|----------------------------------|---------------|
| <b>Western Blot</b> | 1 µg/mL                          | See Below     |

**DATA**



**PREPARATION AND STORAGE**

|                                |  |
|--------------------------------|--|
| <b>Reconstitution</b>          | Sterile PBS to a final concentration of 0.2 mg/mL.   |
| <b>Shipping</b>                | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.<br>*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C   |
| <b>Stability &amp; Storage</b> | <b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul> |

**BACKGROUND**

CAMP (Cathelicidin AntiMicrobial Peptide; also 18 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.