**DESCRIPTION**

**Species Reactivity** Human

**Specificity** Detects human CCL27/CTACK in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant mouse (rm) CCL27/CTACK is observed, 10% cross-reactivity with recombinant human (rh) CCL28 is observed, and no cross-reactivity with rhCCL1, 2, 3, 4, 5, 6, 7, 8, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, rmCCL1, 2, 3, 4, 5, 6, 7, 9/10, 11, 12, 17, 19, 20, 21, 22, 24, 25, 26, or recombinant rat CCL20 is observed.

**Source** Monoclonal Mouse IgG2B Clone # 124315

**Purification** Protein A or G purified from hybridoma culture supernatant

**Immunogen** E. coli-derived recombinant human CCL27/CTACK Phe25-Gly112

**Accession #** NP_006655

**Endotoxin Level** <0.10 EU per 1 μg of the antibody by the LAL method.

**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 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.

<table>
<thead>
<tr>
<th>Recommended Concentration</th>
<th>Sample</th>
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<tr>
<td><strong>Western Blot</strong></td>
<td>1 μg/mL</td>
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**Neutralization** Measured by its ability to neutralize CCL27/CTACK-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with mouse CCR10. The Neutralization Dose (ND$_{50}$) is typically 1.5-5.0 μg/mL in the presence of 1 μg/mL Recombinant Human CCL27/CTACK.

**DATA**

![Chemotaxis Induced by CCL27/CTACK and Neutralization by Human CCL27/CTACK Antibody](chart)

**PREPARATION AND STORAGE**

- **Reconstitution** Reconstitute at 0.5 mg/mL in sterile PBS.
- **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.

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CCL27, also known as CTACK (cutaneous T cell-attracting chemokine), ALP, ILC, and ESKine, is a member of the CC family of chemokines (1). Mature human CCL27 is an 88 amino acid (aa) protein that shares 57% aa sequence identity with mouse and rat CCL27 (2). It shares 11%-35% aa sequence identity with other human CC chemokines. An alternately spliced form of mouse CCL27, known as PESKY, is localized to the nucleus and promotes cellular migration (3). CCL27 is constitutively expressed by keratinocytes and is up-regulated by inflammatory stimuli and in wounded skin (4-7). CCL27 binds the chemokine receptor CCR10, glycosaminoglycans in the extracellular matrix, sulfated tyrosine residues on PSGL-1, and determinants on the surface of fibroblasts and endothelial cells (5, 7-9). CCL27 cooperates with CCL17/TARC in inducing the migration of cutaneous lymphocyte antigen (CLA) positive memory T cells to the skin during inflammation (4, 6, 10-12). Endothelial cell-bound CCL27 can mediate the adhesion of those cells to CLA+ T cells (6). CCL27 also induces the migration of keratinocyte precursors from bone marrow to the skin, thereby promoting wound healing (7). In humans, serum CCL27 levels are elevated and correlate with disease severity in atopic dermatitis, psoriasis vulgaris, and mycosis fungoides (13-15).

References: