HNP1-3, Human, ELISA

- Robust, Reliable & Reproducible
- Inter & Intra variation < 10%
- All components tested separately for variability and stability
- Cross reactive with monkey
- No cross reactivity with bovine, sheep, mouse, rat, rabbit, goat, pig and horse
- > 100 Publications
- Coagulation factors: no influence for sample handling
- Suitable for tissue, BAL and plasma samples

Antibody & Peptide Specifications

- In house production & QC testing of each batch
- Human HNP1-3 protein and human alpha-defensin 5 peptide
- Human defensin 5 antibody
- HNP1-3 antibody
- Rabbit neutrophil defensin 5
- Also available in bulk formats (>1mg) or with specific label

<table>
<thead>
<tr>
<th>Product</th>
<th>Quantity</th>
<th>Cat.#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human HNP1-3 ELISA</td>
<td>1 x 96 det.</td>
<td>HK317-01</td>
</tr>
<tr>
<td>Human HNP1-3 ELISA</td>
<td>2 x 96 det.</td>
<td>HK317-02</td>
</tr>
<tr>
<td>Human HNP1-3 protein</td>
<td>100 µg</td>
<td>HC4014</td>
</tr>
<tr>
<td>Human α-defensin 5 peptide</td>
<td>50 µg</td>
<td>HC2121</td>
</tr>
<tr>
<td>Human defensin 5 antibody</td>
<td>100 µg</td>
<td>HM2228</td>
</tr>
<tr>
<td>Human defensin 5 antibody</td>
<td>0.5 mg</td>
<td>HM2228-IA</td>
</tr>
<tr>
<td>Human HNP1-3 antibody</td>
<td>100 µg</td>
<td>HM2058</td>
</tr>
<tr>
<td>Human HNP1-3 antibody, biotinylated</td>
<td>50 µg</td>
<td>HM2059</td>
</tr>
<tr>
<td>Rabbit neutrophil defensin 5</td>
<td>100 µg</td>
<td>HM4008</td>
</tr>
</tbody>
</table>

Figure: Staining of Defensin-5 on healthy human ileum. Paraffin embedded sections with antibody Cat.# HM2228 in a concentration of 1 µg/ml.
HNP1-3

- Three defensin peptide families are identified, the α-, β-, and θ-defensins.
- α- and β-defensins modify cell migration and maturation, induce cytokines and trigger histamin and prostaglandin D2 release from mast cells. There are six α-defensins: HNP (human neutrophil peptide)-1 to -4, HDS & 6.
- Human neutrophil defensins (alpha-defensins, HNP1-3) are microbicidal, the peptides exert chemotactic, immunomodulating and cytotoxic activity and participate in host defense and inflammation.
- Activation of neutrophils leads to rapid release of defensins.

Diseases

- In normal plasma, low levels of HNP1-3 are present ranging from undetectable level to 50-100 ng/ml.
- In septic conditions, the levels of HNP1-3 might be elevated to 10 mg/ml or even more.
- Immune complexes isolated from patients with pulmonary tuberculosis modulate the activation and function of normal granulocytes. (Senbagavalli et.al., Clin Vaccine Immunol 2012).
- Intestinal defensin secretion in infancy is associated with the emergence of sensitization and atopic dermatitis (Savilathi et.al., Clinical & Experimental Allergy 2012).

Why scientists buy our products:

- Unique products
- Sensitivity
- Specificity
- Easy to use
- Value for money
- 1- & 2-plate kits
- Functional studies
- Technical support
- Standardized assays
- Quality control
- Inter/intra variation <10%
- Well documented products
- Broad in applications