



# Anti-Human ENA-78

20150223ML



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>102-P07</b>
Size:	100 µg
Lot. No.:	According to product label

**Preparation:** Produced from sera of rabbits pre-immunized with highly pure (>98%) recombinant human ENA 78 (human Epithelial Neutrophil Activating Peptide-78). Anti-human ENA 78 specific antibody was purified by affinity chromatography employing immobilized human ENA 78 matrix.

## Target Background

<b>Synonyms (Target):</b>	CXCL5; SCYB5; ENA-78
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Epithelial cell-derived-neutrophil-activating-peptide (ENA78) also known as CXCL5, is an 8 kDa proinflammatory member of the CXC subfamily of chemokines. Its GluLeuArg (ELR) motif confers angiogenic properties and distinguishes it from ELRCXC chemokines which are angiostatic. Human CXCL5 shares 57% amino acid (aa) sequence identity with mouse and rat CXCL5. Among other human ELR+ chemokines, it shares 77% aa sequence identity with CXCL6/GCP2 and 35% with CXCL1/GRO alpha, CXCL2/GRO beta, CXCL3/GRO gamma, CXCL7/NAP2, and CXCL8/IL8. Inflammatory stimulation upregulates CXCL5 production in multiple hematopoietic cell types, fibroblasts, endothelial cells, and vascular smooth muscle cells. In vivo, CXCL5 is elevated at sites of inflammation and pulmonary fibrosis where it promotes neutrophil infiltration and activation as well as angiogenesis. Its upregulation contributes to increased vascularization, tumor growth, and metastasis in many cancers. Full length CXCL5 (78 aa) is trimmed at the N-terminal end by Cathepsin G and chymotrypsin to ENA74 (74 aa) and ENA70 (70 aa), with the shortened forms showing increased potency relative to full length CXCL5. CXCL5 exerts its effects primarily through interactions with CXCR2. It also binds DARC, a decoy chemokine receptor which can limit CXCR2-mediated responses.

### Database References Target

<b>Protein RefSeq:</b>	NP_002985.1
<b>Uniprot ID:</b>	P42830
<b>mRNA RefSeq:</b>	NM_002994.3

## Product Specifications

<b>Species reactivity</b>	Human
<b>Clone/Ab feature</b>	Rabbit IgG
<b>Cross reactivity</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal Antibody
<b>Purification</b>	Antigen-affinity purified
<b>Immunogen</b>	Recombinant Human ENA-78 (CXCL5)
<b>Formulation</b>	lyophilized from PBS
<b>Reconstitution buffer</b>	water

**Reconstitution:** Reconstitute the antibody in sterile water to a concentration of 0.1 - 1.0 mg/ml.

**Stability:** The lyophilized antibody is stable for at least 2 years from date of receipt at -20°C. The reconstituted antibody is stable for at least two weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.



**AVOID REPEATED FREEZE AND THAW CYCLES!**

### Applications

**Neutralization:** To yield one-half maximal inhibition [ND<sub>50</sub>] of the biological activity of human ENA-78 (100.0 ng/ml), a concentration of 15 - 20 µg/ml of this antibody is required.

**Western Blot:** To detect human ENA-78 by Western Blot analysis this antibody can be used at a concentration of 0.1 - 0.2 µg/ml. Used in conjunction with compatible secondary reagents the detection limit for recombinant human ENA-78 is 1.5 - 3.0 ng/lane, under either reducing or non-reducing conditions.

**ELISA:** To detect human ENA-78 by direct ELISA (using 100µl/well antibody solution) a concentration of at least 0.5µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with compatible secondary reagents, allows the detection of 0.2 - 0.4 ng/well of recombinant human ENA-78.

**NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!**