Recombinant Protein Technical Manual

Recombinant Human Azurocidin/CAP37 Protein (His Tag)

RPES3200

Product Data:

Product SKU: RPES3200

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P20160

Protein Information:

Molecular Mass: 25.2 kDa

AP Molecular Mass: 38 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of 20mM HEPES, 150mM NaCl, pH 7.5.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Azurocidin; Cationic Antimicrobial Protein CAP37; Heparin-Binding Protein; HBP; AZU1;AZAMP;AZU;AZU1;hHBP;HUMAZUR;NAZC

Immunogen Information:

Sequence: Ile27-Pro250

Background:

Azurocidin is an Azurophil granule antibiotic protein, with monocyte chemotactic and antibacterial activity. The Azurophil granules, specialized lysosomes of the neutrophil, contain at least 10 proteins implicated in the killing of microorganisms. Azurocidin is a member of the serine protease family that includes Cathepsin G, Neutrophil Elastase (NE), and Proteinase 3 (PR3), however, Azurocidin is not a serine proteinase since the active site serine and histidine residues are replaced. Human Azurocidin together with NE and PR3 are expressed coordinately and are packaged together into azurophil granules during neutrophil differentiation. Azurocidin has been identified as a modulator of endothelial permeability and an important multifunctional inflammatory mediator. Neutrophils arriving first at sites of inflammation release Azurocidin which acts in a paracrine fashion on endothelial cells causing the development of intercellular gaps and allowing leukocyte extravasation. Azurocidin thus be regarded as a reasonable therapeutic target for a variety of inflammatory disease conditions.