General Information

Gene Name Synonym:
AZAMP; AZU; AZU1; CAP37; HBP; hHBP; HUMAZUR; NAZC

Protein Construction:
A DNA sequence encoding the human AZU1 (NP_001691.1) (Met 1-Pro 250) with a C-terminal polyhistidine tag was expressed.

Source: Human
Expression Host: HEK293 Cells

QC Testing
Purity: > 95 % as determined by SDS-PAGE
Endotoxin: < 1.0 EU per μg of the protein as determined by the LAL method

Stability:
Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Ile 27

Molecular Mass:
The secreted recombinant human AZU1 comprises 235 amino acids with a predicted molecular mass of 25.6 kDa. As a result of glycosylation, rh AZU1 migrates as an approximately 37 kDa band in SDS-PAGE under reducing conditions.

Formulation:
Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:
Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:

Protein Description

Azurocidin (AZU1), also known as heparin-binding protein (HBP) or cationic antimicrobial protein 37 (CAP37), 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. 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. It thus be regarded as a reasonable therapeutic target for a variety of inflammatory disease conditions.

References