

S100A8, His, Human

Cat. No.: Z03088-5

Size: 5.0 ug

Synonyms: Calgranulin A, MRP8, CAGA, CGLA, CFAG, Protein S100-A8, S100 calcium-binding protein A8, Migration inhibitory factor-related protein 8, MRP-8, p8, Cystic fibrosis antigen, Leukocyte L1 complex light chain, Calprotectin L1L subunit, Urinary stone protein band A, S100A8, MIF, NIF, L1Ag, CP-10, MA387, 60B8AG.

Description:

S100 calcium-binding protein A8 (S100A8) is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. S100A8 protein plays an important role in the regulation of inflammation. It can activate inflammatory cells and cytokines via chemotactic activity for neutrophils, and it can bind to the receptor for advanced glycation end products (RAGE) and Toll-like receptor 4 (TLR4), thus mediating intracellular inflammatory signaling transduction. S100A8 is detected in various human cancers, presenting abundant expression in neoplastic tumor cells as well as infiltrating immune cells. S100A8 exhibits high constitutive expression in neutrophils and activated macrophages, and is also found in epithelial cells under pathological conditions.

Recombinant S100 calcium-binding protein A8 (S100A8) with His tag produced in *E. coli* is a single chain containing 100 amino acids with molecular mass of 11.8 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001 MHHHHHMLT ELEKALNSII DVYHKYSLIK GNFHAVYRDD
00041 LKKLLETECP QYIRKKGADV WFKELDINTD GAVNFQEFLI
00081 LVIKMGVAAH KKSHEESHKE
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Source: *E. coli*

Species: Human

Molecular Weight: 11.8 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against 20 mM Tris-HCl, 1 mM DTT, 0.1 mM EDTA, pH8.0.

Reconstitution: Reconstituted in ddH₂O at 200 µg/ml.

Purity: > 95% as analyzed by SDS-PAGE and HPLC.

Endotoxin Level: < 1 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant S100 calcium-binding protein A8 (S100A8) remains stable up to 6 months at -80°C from date of receipt. Upon reconstitution, S100A8 remains stable up to 2 week at 4°C or up to 3 months at -20°C.