

Rev03
 Update: Dec,14,2021

DATASHEET

S100A8, His, Human

Cat. No.: Z03088

Product Introduction

Species	Human
Protein Construction	<div style="display: flex; align-items: center; gap: 10px;"> <div style="background-color: #4a7c9c; color: white; padding: 5px 10px; border-radius: 3px;">Poly-His</div> <div style="background-color: #0070c0; color: white; padding: 5px 10px; border-radius: 3px;">S100A8 (Ala25-Lys96) Accession # P05109</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> N-term C-term </div>
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	< 1 EU/μg of protein by gel clotting method
Expression System	E. coli
Apparent Molecular Weight	~11.8 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized after extensive dialysis against 20 mM Tris-HCl, 1 mM DTT, 0.1 mM EDTA, pH 8.0.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH ₂ O at 200 μg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Background

Target Background : 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.

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

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