

Recombinant Human Calprotectin(S100A8&S100A9) (His Tag)

产品信息

产品名称	产品编号	规格
Recombinant Human Calprotectin(S100A8&S100A9) (His Tag)	93763ES60	100 µg
	93763ES76	500 µg

产品描述

S100A8 (also known as MRP8, Calgranulin A, and CP-10) and S100A9 (also known as MRP14 and Calgranulin B) are pro-inflammatory members of the S100 family of secreted calcium binding proteins. They are up-regulated in neutrophils and monocytes at sites of inflammation (e.g. psoriasis, rheumatoid arthritis, cardiac ischemia) and are present at elevated concentrations in rheumatoid arthritis synovial fluid. The 10 kDa human S100A8 and 14 kDa S100A9 each contain two EF-hand calcium binding motifs. Human S100A8 shares 57% and 61% amino acid (aa) sequence identity with mouse and rat S100A8, respectively. Human S100A9 shares 57% and 62% amino acid sequence identity with mouse and rat S100A9, respectively. S100A8 and S100A9 are noncovalent homodimers that can also noncovalently heterodimerize; in the presence of calcium and zinc, the homodimer and heterodimers will form tetramers. The heterodimer additionally binds and sequesters manganese, thereby restricting the growth of Mn-dependent bacteria. The S100A8/A9 heterodimer exhibits functions beyond those performed by the individual proteins. These include binding to fatty acids such as arachidonic acid and promoting astrocyte proliferation. S100A8, S100A9, and the heterodimer each promote neutrophil infiltration into sites of inflammation and inflammatory cytokine production by monocytes.

产品性质

别名	Protein S100-A8; Calgranulin-A; CFAG; MRP-8; S100 calcium-binding protein A8; Protein S100-A9; MRP-14; S100 calcium-binding protein A9
Uniprot No.	P05109(S100A8)&P06702(S100A9)
表达区间及表达系统	Recombinant Human Calprotectin (S100A8&S100A9) Protein is expressed from E.coli Cells with His tag at the C-terminal. It contains Met1-Glu93(S100A8)&Thr2-Pro114(S100A9).
分子量	Approximately 11.7 kDa(S100A8)&13.2 kDa(S100A9) same as Tris-Bis PAGE result.
纯度	> 95% as determined by SDS-PAGE and HPLC.
内毒素	< 1.0 EU per 1µg of the protein by the LAL method.
制剂	Lyophilized from 0.22 µm filtered solution in 2mM DTT, PBS (pH 7.2). Normally 5% trehalose is added as protectant before lyophilization.
复溶	Centrifuge tubes before opening. Reconstituting to a concentration more than 100 µg/mL is recommended (usually we use 1 mg/mL solution for lyophilization). Dissolve the lyophilized protein in distilled water.

运输与保存方法

冰袋运输。-20°C至-80°C保存，一年有效期。

复溶后，-20 至 -80°C，在未开封状态下保存 3-6 个月。复溶后，2-8°C 保存 2-7 天。

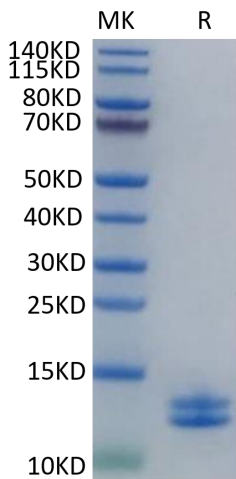
建议第一次使用时分装冻存，避免反复冻融。

注意事项

1. 避免反复冻融。
2. 为了您的安全和健康，请穿实验服并戴一次性手套操作。
3. 本产品仅作科研用途！

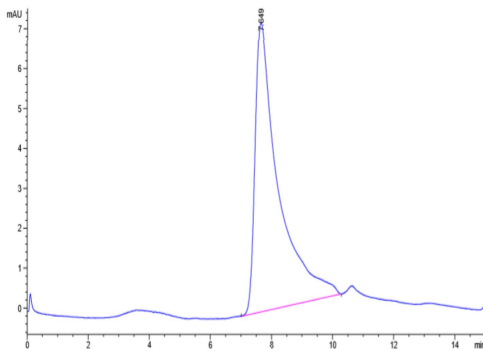
产品数据

Tris-Bis PAGE



Human Calprotectin (S100A8&S100A9) on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



The purity of Human Calprotectin (S100A8&S100A9) is greater than 95% as determined by SEC-HPLC.