



Recombinant Calprotectin Protein [His] (DAGC002)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Species	Human
Purity	>95%
Conjugate	His
Applications	ELISA, LFIA, TIA
Molecular Weight	24 kDa
Format	Liquid
Size	100 µg
Buffer	Tris Buffer, pH 8.0
Preservative	0.09% Sodium Azide
Storage	2-8°C

BACKGROUND

Introduction	<p>S100A8/A9, also known as Calprotectin, is a heterodimeric protein that belongs to the family of low molecular weight, calcium binding S100 proteins with two EF-hand calcium binding domains. Calcium and zinc binding influences the S100A8/A9 conformation and oligomerization state, which includes the self-assembly into homo- and heterodimers and larger oligomers. S100A8/A9 is elevated in blood and other body fluids in many pathological conditions including rheumatoid arthritis, inflammatory bowel diseases, viral or microbial infections, and tumors. S100A8/A9 is identified as an endogenous activator of TLR4 and is involved in promoting the</p>
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inflammatory response in infections. Neutrophil-derived S100A8/A9 inhibits growth of *Staphylococcus aureus* through the chelation of manganese and zinc. S100A8/A9 is also identified as a potent amplifier of inflammation in autoimmunity as well as in cancer development and tumor spread. Injury induced by S100A8/A9 stimulates IP-10 production in monocytes and macrophages. In addition, the S100A8/A9 heterodimer also promotes astrocyte proliferation.

Keywords

Calprotectin; Human S100A8 (Myeloid-related protein; MRP 8); S100A9 (MRP14); calgranulin A and B; L1; cystic fibrosis antigen; 27E10 antigen; P8; MIF; NIF; CAGA; CFAG; CGLA; L1Ag; MRP8; CP-10; MA387; 60B8AG
