

**Synonym**

S100A10,p11,p10,ANX2LG,CAL1L,CLP11

**Source**

Human S100A10, His Tag (S10-H5127) is expressed from E.coli cells. It contains AA Met 1 - Lys 97 (Accession # AAH15973).

Predicted N-terminus: Met

**Molecular Characterization**

S100A10(Met 1 - Lys 97)  
AAH15973 Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 12.0 kDa. The protein migrates as 14 kDa under reducing (R) condition (SDS-PAGE).

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>95% as determined by SDS-PAGE.

**Formulation**

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 150 mM NaCl, pH8.0. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

**Reconstitution**

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

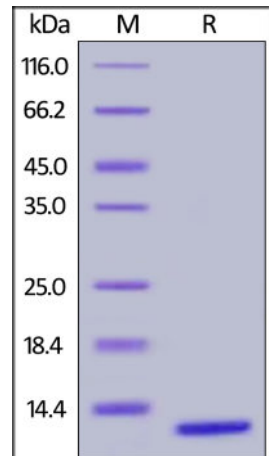
**Storage**

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**SDS-PAGE**

Human S100A10, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

**Background**

S100 calcium-binding protein A10 (S100A10), a member of the S100 family of proteins containing two EF-hand calcium-binding motifs, is also known as protein S100-A10, calpactin I light chain, cellular ligand of annexin II, p10 protein and p11, which can be found as a free monomer, a homodimer, or a heterotetramer composed of a p11 dimer complex with two molecules of annexin II. S100A10 is an integral part of cellular structural scaffolding that interacts with plasma membrane proteins through its association with annexin II. S100A10 also works together with cytosolic and peripheral membrane-associated proteins such as AHNAK in the development of the intracellular membrane. Furthermore, S100A10 has been implicated in the transportation of proteins involved in mood regulation,

nociception, and cell polarization. Complexed with the annexin II, S100A10 binds receptor and channel proteins and guides them to the cell surface, resulting in increased membrane localization and consequent magnified functional expression of these proteins.

### References

- (1) [Harder T., et al., 1992, Gene. 113\(2\):269-74.](#)
- (2) [Choudhary C., et al., 2009, Science 325:834-840.](#)
- (3) [Rety S., et al., 1999, Nat. Struct. Biol. 6:89-95.](#)

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.