

Synonym

S100P,S100E,MIG9

Source

Human S100P, Tag Free (S1P-H5110) is expressed from E.coli cells. It contains AA Met 1 - Lys 95 (Accession # AAH06819).

Predicted N-terminus: Met

Molecular Characterization

S100P(Met 1 - Lys 95)
AAH06819

This protein carries no "tag".

The protein has a calculated MW of 10.4 kDa. The protein migrates as 10.4 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.

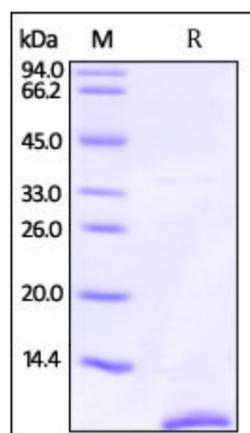
Storage

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

Please avoid repeated freeze-thaw cycles.

No activity loss was observed 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 S100P, Tag Free 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 P (S100P), a member of the S-100 family, is also known as protein S100-P, migration-inducing gene 9 protein (MIG9) and protein S100-E, which contains two EF-hand domains. As for subunit structure, S100P is homodimer and heterodimer with S100A1. S100P may function as calcium sensor and contribute to cellular calcium signaling. In a calcium-dependent manner, S100P functions by interacting with other proteins, such as EZR and PPP5C, and indirectly plays a role in physiological processes like the formation of microvilli in epithelial cells. Furthermore, S100P may stimulate cell proliferation in an autocrine manner via activation of the receptor for activated glycation end products (RAGE).

References

- (1) [Becker T., et al., 1992, Eur. J. Biochem. 207:541-547.](#)
- (2) [Koltzsch M., et al., 2003, Mol. Biol. Cell 14:2372-2384.](#)
- (3) [Arumugam T., et al., 2004, J. Biol. Chem. 279:5059-5065.](#)

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.