Data Sheet (Cat.No.TMPY-01331)

TargetMol

S100A11 Protein, Human, Recombinant

General Information

Synonyms:	S100C;HEL-S-43;S100 calcium binding protein A11;MLN70
Protein Construction:	A DNA sequence encoding the native human S100A11 (NP_005611.1) (Met 1-Thr 105) was expressed. Predicted N terminal: Met
Species:	Human
Expression Host:	E. coli
Accession:	P31949
Molecular Weight:	24 & 12 kDa (non-reduced condition)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 97 % as determined by SDS-PAGE
Endotoxin:	Please contact us for more information.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Shipping:

In general, Lyophilized powders are shipping with blue ice.

Protein Background

Protein S100-A11, also known as S100 calcium-binding protein A11, S100A11 and MLN70, is a member of theS-100 family. S100A11 is widely expressed in multiple tissues, and is located in cytoplasm, nucleus, and even cell periphery. S100A11 exists as a non-covalent homodimer with an antiparallel conformation. Ca(2+) binding to S100A11 would trigger conformational changes which would expose the hydrophobic cleft of S100A11 and facilitate its interaction with target proteins. As a dual cell growth mediator, S100A11 acts as either a tumor

suppressor or promoter in many different types of tumors and would play respective roles in influencing the proliferation of the cancer cells. In the nucleus, S100A11 suppresses the growth of keratinocytes through p21 (CIP1/WAF1) activation and induces cell differentiation. S100A11 is also a novel diagnostic marker in breast carcinoma.

Reference

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Ohuchida K. et al., 2006, Clin Cancer Res 12 (18): 5417-22.
Kouno T. et al., 2008, J Pept Sci. 14 (10): 1129-38.
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Liu XG. et al., 2010, Oncol Rep. 23 (5): 1301-8.