# **Human S100A2 Protein (Fc Tag)**

Catalog Number: 10180-H01H



### **General Information**

### Gene Name Synonym:

CAN19; S100L

#### **Protein Construction:**

A DNA sequence encoding the human S100A2 (NP\_005969.1) (Met 2-Pro98) was expressed with the fused Fc region of human IgG1 at the N-terminus

Source: Human

Expression Host: HEK293 Cells

**QC** Testing

Purity: > 95 % as determined by SDS-PAGE

**Endotoxin:** 

 $< 1.0 \; EU \; per \; \mu g$  of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt  $\,$  at -70  $\,$   $^{\circ}$ C

Predicted N terminal: Glu 20

#### **Molecular Mass:**

The recombinant human Fc/S100A2 is a disulfide-linked homodimer. The reduced monomer consists of 334 amino acids and has a predicted molecular mass of 37.6 kDa. As a result of glycosylation, the apparent molecular mass of rh Fc/S100A2 monomer is approximately 40 kDa in SDS-PAGE under reducing conditions.

#### Formulation:

Lyophilized from sterile 100mM Glycine, 10mM NaCl, 50mM Tris, pH 7.5

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

### **Usage Guide**

### Storage:

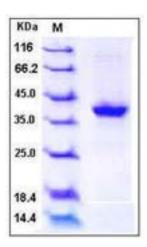
Store it under sterile conditions at  $-20\,^{\circ}\mathrm{C}$  to  $-80\,^{\circ}\mathrm{C}$  upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

## Reconstitution:

Detailed reconstitution instructions are sent along with the products.

#### SDS-PAGE:



### **Protein Description**

The calcium-binding Protein S100A2 is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. S100 family genes are located as a cluster on chromosome 1q21, and S100 proteins consisting of at least 20 members are involved in the regulation of a number of cellular processes such as cell-cycle progression and cell differentiation. S100A2 was first detected in lung and kidney, and is mainly expressed in a subset of tissues and cells such as breast epithelia and liver. The S100A2 protein is a homodimer that undergoes a conformational change upon binding of calcium, and the active form functions in regulating cell proliferation and differentiation, gene transcription, and p53-dependent growth arrest and apoptosis. Accordingly, this protein is regarded as a putative tumor suppressor, and thus chromosomal rearrangements and reduced expression of S100A2 gene have been implicated in certain carcinomas.

#### References

1.Gimona, M. et al., 1997, J. Cell. Sci. 110: 611-621. 2.Mueller, A. et al., 2005, J. Biol. Chem. 280: 29186-29193. 3.Lapi, E. et al., 2006, Oncogene. 25: 3628-3637.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

For US Customer: Fax: 267-657-0217 • Tel: 215-583-7898

Global Customer: Fax :+86-10-5862-8288 • Tel:+86-400-890-9989 • http://www.sinobiological.com