

## Recombinant Human S100A8/S100A9 293 Cell Lysate

**Cat. No.** S100A8/S100A9-08HCL    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant human S100 calcium-binding protein A8 and A9 (S100A8-S100A9 fusion protein) overexpression cell lysate, derived from the transfected HEK293 cells. Purchase will also include one vial of normal control, the cell lysate of HEK293 cells transfected with empty expression vector.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Source</b>           | HEK293                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Description</b>      | <p>The protein encoded by this gene is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. S100 proteins are localized in the cytoplasm and/or nucleus of a wide range of cells, and involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. S100 genes include at least 13 members which are located as a cluster on chromosome 1q21. This protein may function in the inhibition of casein kinase and as a cytokine. Altered expression of this protein is associated with the disease cystic fibrosis.</p> <p>Multiple transcript variants encoding different isoforms have been found for this gene.</p> <p>The protein encoded by this gene is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. S100 proteins are localized in the cytoplasm and/or nucleus of a wide range of cells, and involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. S100 genes include at least 13 members which are located as a cluster on chromosome 1q21. This protein may function in the inhibition of casein kinase and altered expression of this protein is associated with the disease cystic fibrosis. This</p> |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       | antimicrobial protein exhibits antifungal and antibacterial activity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Form</b>           | Lyophilized powder                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Molecular Mass</b> | 25 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>AA Sequence</b>    | S100A8: Leu2-Glu93, S100A9: Thr2-Pro114                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Purity</b>         | Unpurified cell lysate. HEK293 cells transfected with expression vectors harboring target gene were harvested and washed with PBS twice. The cell pastes were re-suspended with ice-cold PBS containing mammalian cell protease inhibitor cocktail and further lysed with freeze-thaw cycles. After clarifying with 20,000 g centrifugation at 4°C for 30 min, the lysate was aliquoted, lyophilized, and stored at -80°C immediately. Protein concentration was determined by BCA kit using BSA as protein standard. The gene overexpression in lysate was confirmed by Western blotting using anti-His tag antibody and/or target-specific antibodies and the lysate derived from HEK293 cells transfected with the empty expression vector was used as a negative control. |
| <b>Usage</b>          | This product is furnished for LABORATORY RESEARCH USE ONLY. Not for diagnostic or therapeutic use.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Storage</b>        | Upon arrival, the lyophilized protein may be stored for 2 weeks at centigrade. For long term storage, it is recommended to store desiccated below -20 centigrade in a manual defrost freezer. Following reconstitution, the protein may be stored for 2 weeks under sterile conditions at -20 centigrade. For long term storage, it is recommended to make appropriate aliquots and store at -80 centigrade. Avoid repeated freeze-thaw cycles.                                                                                                                                                                                                                                                                                                                               |
| <b>Concentration</b>  | Determined by BCA protein assay.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                       |                                                                                                                                                               |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Storage Buffer</b> | Lyophilized from a 0.2 um filtered solution in PBS (pH 7.4) containing mammalian cell protease inhibitor cocktail.                                            |
| <b>Reconstitution</b> | Briefly spin the vial and bring the contents to the bottom prior to opening. It is recommended to reconstitute at 0.5 - 1 mg/mL with sterile deionized water. |
| <b>Shipping</b>       | Ice packs. Including one vial of HEK293 cell lysate transfected with empty expression vector.                                                                 |

## GENE INFORMATION

|                        |                                                                                                                                                       |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | S100A8 S100 calcium binding protein A8 [ Homo sapiens (human) ]&S100A9 S100 calcium binding protein A9 [ Homo sapiens (human) ]                       |
| <b>Official Symbol</b> | S100A8&S100A9                                                                                                                                         |
| <b>Synonyms</b>        | P8; MIF; NIF; CAGA; CFAG; CGLA; L1Ag; MRP8; CP-10; MA387; 60B8AG; S100-A8&MIF; NIF; P14; CAGB; CFAG; CGLB; L1AG; LIAG; MRP14; 60B8AG; MAC387; S100-A9 |
| <b>Gene ID</b>         | 6279&6280                                                                                                                                             |
| <b>mRNA Refseq</b>     | NM_002964.5&NM_002965.4                                                                                                                               |
| <b>Protein Refseq</b>  | NP_002955.2&NP_002956.1                                                                                                                               |
| <b>MIM</b>             | 123885&123886                                                                                                                                         |
| <b>UniProt ID</b>      | P05109&P06702                                                                                                                                         |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA