

32-8882: Recombinant Human S100A11

Gene : S100A11

Gene ID : 6282

Uniprot ID : P31949

Description

Source: E. coli.

MW :11.7kD.

Recombinant Human Protein S100-A11 is produced by our E.coli expression system and the target gene encoding Met1-Thr105 is expressed. S100A11 is a member of the S100 family of calcium binding proteins. Human S100A11 contains two EF hand motifs and shares 82% amino acid sequence identity with mouse and rat S100A11. It forms covalent homodimers upon transglutamination and also disulfide-linked tetramers. S100A11 is secreted by keratinocytes and can be crosslinked into the cornified envelope of the skin. Dimerization enhances its ability to signal through RAGE on keratinocytes, induce the production of EGF family proteins, and induce cell proliferation. Dimerization also enables S100A11 to bind RAGE on chondrocytes, leading to chondrocyte hypertrophy and catabolism of the cartilage matrix. S100A11 is additionally found in the cytosol where it becomes phosphorylated and translocates to the nucleus in response to DNA damage, RELM alpha exposure, or elevated extracellular calcium concentrations. Calcium also promotes S100A11 association with S100B as well as Annexins A1, A2, and A6. S100A11-Annexin A2 complexes are recruited to sites of plasma membrane damage where they facilitate membrane repair in migrating cancer cells. S100A11 is upregulated in various cancers and supports tumor cell proliferation, invasion, and migration. In addition, S100A11 is produced in the ovary, and it acts on cumulus cells to inhibit oocyte fertilization.

Product Info

Amount : 10 µg / 50 µg

Content : Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

Storage condition : Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.

Amino Acid : MAKISSPTETERCIESLIAVFQKYAGKDGYNITLSKTEFLSFMNTELA AFTKNQKDPGVLD RMMKKLDTNSDGQ LDFSEFLNLIGGLAMACHDSFLKAVPSQKRT

Application Note

Endotoxin : Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.