

Product datasheet for **TP727598**

S100A11 Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant Human S100A11
Species:	Human
Expression cDNA Clone or AA Sequence:	Met1-Thr105
Buffer:	Lyophilized from a 0.2 um filtered solution of PBS, 1mM DTT, pH 7.4.
Note:	Recombinant Human Protein S100-A11 is produced by our E.coli expression system and the target gene encoding Met1-Thr105 is expressed.
Storage:	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.
Stability:	12 months from date of despatch
Locus ID:	6282
UniProt ID:	P31949
Synonyms:	Protein S100-A11; Calgizzarin; Metastatic lymph node gene 70 protein; MLN 70; Protein S100-C; S100 calcium-binding protein A11; S100A11; MLN70; S100C



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Summary:

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.