

# Human S100A3 Low Endotoxin

Human, recombinant protein expressed in *E. coli*.  
Low Endotoxin & Sterilized  
Cat# CY-R2453

Amount: 100 µg (µg/µl)

Lot:

**Introduction:**

The protein S100A3, formerly called S100E, was recognized for the first time as the product of one of the tightest gene clusters discovered in the human genome located on chromosome 1q21. The S100A3 gene shows a low but general transcription level in diaphragm, heart, skeletal muscle, stomach, lung, liver, fat tissue, and placenta. S100A3 shows a remarkably narrow tissue- and cell-specific expression pattern. It is highly expressed in hair root cells and some astrocytomas. Because both cell types are characterized by high proliferation rates S100A3 is supposed to be involved in cell cycle progression. Within the S100 subfamily S100A3 is unique for the exceptionally high number of Cys residues. Despite the Cys frequency, S100A3 does not display the classical zinc-binding motifs seen in metallothioneins, DNA-binding proteins, or protein kinase C.

**Product Description:**

Full length of human S100A3, containing an N-terminal GST tag, expressed in *E. coli*. and purified by GSH agarose chromatography.

**Gene Information:**

The gene accession number is NM\_006271.

**Gene Aliases:**

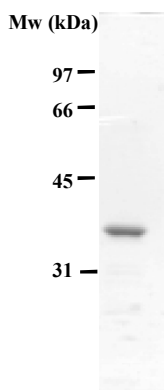
S100E

**Formulation:**

Recombinant human S100A3 is supplied frozen in 2X PBS (2X phosphate buffered saline) containing 50 % glycerol.

**Endotoxin Concentration:**

< 0.01 EU/µg as determined by Limulus Amebocyte Lysate (LAL) assay

**Molecular Weight:** 34 kDa

Recombinant human S100A3 demonstrates approximately 34 kDa band by SDS-PAGE analysis.

Purity is over 90 % estimated by SDS-PAGE analysis.

**Storage:**

Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, AVOID REPEATED HANDLING AND MULTIPLE FREEZE/THAW CYCLES.

**Stability:**

Unopened vial at -70 °C, for 1 year after delivery.

**References:**

1. Engelkamp D et al. (1993) Six S100 genes are clustered on human chromosome 1q21: identification of two genes coding for the two previously unreported calcium-binding proteins S100D and S100E. *Proc. Nat. Acad. Sci.* 90: 6547-6551
2. Kizawa K, Uchiwa H, Murakami U (1996) Highly-expressed S100A3, a calcium-binding protein, in human hair cuticle. *Biochim Biophys Acta* 1312:94-98
3. Fritz G et al. (2002) The crystal structure of metal-free human EF-hand protein S100A3 at 1.7-Å resolution. *J Biol Chem.* 277: 33092-8

**Related Products**

- \* CircuLex S100A13 ELISA Kit: Cat# CY-8057
- \* CircuLex S100A12 ELISA Kit: Cat# CY-8058
- \* CircuLex S100P ELISA Kit: Cat# CY-8060
- \* CircuLex S100A8-MRP8 ELISA Kit: Cat# CY-8061
- \* CircuLex S100A9-MRP14 ELISA Kit: Cat# CY-8062
- \* CircuLex S100A11 ELISA Kit: Cat# CY-8063
- \* CircuLex S100A14 ELISA Kit: Cat# CY-8064
- \* CircuLex S100A7/Psoriasis ELISA Kit: Cat# CY-8073
- \* CircuLex S100A4 ELISA Kit Ver.2: Cat# CY-8086
  
- \* Anti-Human S100A3 (Clone YK-3E3): Cat# CY-M1039
- \* Anti-Human S100A4 (p9Ka): Cat# CY-P1026
- \* Anti-Human S100P: Cat# CY-P1028
- \* Anti-Human S100A10: Cat# CY-P1033
- \* Anti-Human S100A16: Cat# CY-P1034

**For Research Use Only, Not for use in diagnostic procedures**

- \* **Anti-Human S100A3: Cat# CY-P1039**
- \* **Anti-Human S100A2: Cat# CY-P1040**
  
- \* **Human S100B: Cat# CY-R2250**
- \* **Human S100A1: Cat# CY-R2251**
- \* **Human S100A2: Cat# CY-R2252**
- \* **Human S100A3: Cat# CY-R2253**
- \* **Human S100A4: Cat# CY-R2254**
- \* **Human S100A5: Cat# CY-R2255**
- \* **Human S100A6: Cat# CY-R2256**
- \* **Human S100A7: Cat# CY-R2257**
- \* **Human S100A8: Cat# CY-R2258**
- \* **Human S100A9: Cat# CY-R2259-G**
- \* **Human S100A9: Cat# CY-R2259-H**
- \* **Human S100A10: Cat# CY-R2260**
- \* **Human S100A12: Cat# CY-R2262-G**
- \* **Human S100A12: Cat# CY-R2262-H**
- \* **Human S100A13: Cat# CY-R2263**
- \* **Human S100A14: Cat# CY-R2264**
- \* **Human S100A16: Cat# CY-R2266**
- \* **Human S100P: Cat# CY-R2267**
- \* **Human S100A11: Cat# CY-R2269**
  
- \* **Human S100A1 Low Endotoxin: Cat# CY-R2451**
- \* **Human S100A3 Low Endotoxin: Cat# CY-R2453**
- \* **Human S100A4 Low Endotoxin: Cat# CY-R2454**
- \* **Human S100A7 Low Endotoxin: Cat# CY-R2457**
- \* **Human S100A8 Low Endotoxin: Cat# CY-R2458**
- \* **Human S100A9 Low Endotoxin: Cat# CY-R2459-G**
- \* **Human S100A11 Low Endotoxin: Cat# CY-R2461**
- \* **Human S100A12 Low Endotoxin: Cat# CY-R2462-G**
- \* **Human S100A14 Low Endotoxin: Cat# CY-R2464**
- \* **Human S100P Low Endotoxin: Cat# CY-R2467**

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