

For Research Use Only, Not for use in diagnostic procedures

## Human S100A2

Human, recombinant protein expressed in *E. coli*.

Cat# CY-R2252

Amount: 100 µg (1.0 µg/µl)

Lot:

**Introduction:**

S100A2 is a member of the subfamily of S100 Ca<sup>2+</sup>-binding proteins, characterized by two distinct EF-hand structural motifs. It is a homodimeric protein that upon binding of calcium undergoes a conformational change. The S100A2 protein has been first detected in lung and kidney and is mainly expressed in a subset of tissues and cells such as breast epithelia and liver. Interestingly the cDNA coding for the S100A2 protein was identified as a novel tumor suppressor gene by subtractive hybridization between normal and tumor-derived human mammary epithelial cells. Expression studies showed that the S100A2 gene is markedly down-regulated in several tumor tissues of various origins like melanomas (13) and breast carcinoma (14). Moreover, growth factors were reported to alter the S100A2 gene expression at late G1/S-phase, indicating that S100A2 is cell cycle-regulated. Site-specific DNA methylation of the S100A2 gene promoter region in normal versus tumorigenic breast cancer cell lines indicated repression of gene expression in tumor cells, thus suggesting a role for S100A2 in suppression of tumor cell growth and possibly inhibition of tumor progression.

**Product Description:**

Full length of human S100A2, containing an N-terminal GST tag, expressed in *E. coli*. and purified by GSH agarose chromatography.

**Gene Information:**

The gene accession number is NM\_005978.

**Gene Aliases:**

S100L, CN19

**Formulation:**

Recombinant human S100A2 is supplied frozen in 2X PBS (2X phosphate buffered saline) containing 50 % glycerol.

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Mw (kDa)

97 —

66 —

45 —

31 —

Recombinant human S100A2 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. Lee, S. W., Tomasetto, C., Swisshelm, K., Keyomarsi, K. and Sager, R. (1992) *Proc. Natl. Acad. Sci. U.S.A.* 89 (6), 2504-2508
2. Lee, S. W., Tomasetto, C., Swisshelm, K., Keyomarsi, K., and Sager, R. (1992) *Proc. Natl. Acad. Sci. U. S. A.* 89, 2504-2508
3. Wicki, R., Franz, C., Scholl, F., Heizmann, C., and Schafer, B. (1997) *Cell Calcium* 22, 243-254

**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/Psoriasin 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

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- \* 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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