

For Research Use Only, Not for use in diagnostic procedures

Human S100A5

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

Cat# CY-R2255

Amount: 100 µg (1.0 µg/µl)
Lot:**Introduction:**

The protein S100A5, formerly called S100D, 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. S100A5 is a member of the EF-hand superfamily of calcium-binding proteins that is poorly characterized at the protein level. Immunohistochemical analysis demonstrates that it is expressed in very restricted regions of the adult brain and Henle portion of kidney. The homodimeric S100A5 binds four Ca²⁺ ions with strong positive cooperativity and an affinity 20-100-fold higher than the other S100 proteins studied under identical conditions. S100A5 also binds two Zn²⁺ ions and four Cu²⁺ ions per dimer. Cu²⁺ binding strongly impairs the binding of Ca²⁺.

Product Description:

Full length of human S100A5, containing an N-terminal GST tag, expressed in *E. coli*. and purified by GSH agarose chromatography.

Gene Information:

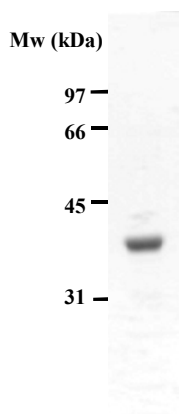
The gene accession number is NM_002962.

Gene Aliases:

S100D

Formulation:

Recombinant human S100A5 is supplied frozen in 2X PBS (2X phosphate buffered saline) containing 50 % glycerol.

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Recombinant human S100A5 demonstrates approximately 36 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. Beat W. et al. Cox (2000) Brain S100A5 Is a Novel Calcium-, Zinc-, and Copper Ion-binding Protein of the EF-hand Superfamily *J. Biol. Chem.* 275: 30623.
2. 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.
3. T Teratani et al. (2002) Restricted expression of calcium-binding protein S100A5 in human kidney. *Biochem Biophys Res Commun*, 291: 623-7.

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

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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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