



Anti-human S100A7 Antibody

ORDERING INFORMATION

Catalog Number: AF4475

Lot Number: CAEM01

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human S100A7

Immunogen: *E. coli*-derived rhS100A7

Ig Type: sheep IgG

Applications: Western blot
Direct ELISA

Background

S100A7 (also Psoriasin) is an 11 - 13 kDa member of the S101 family, EF-hand superfamily of Ca-binding proteins. It is produced by keratinocytes and exists as both an intracellular and extracellular polypeptide. Interacellularly, it binds to E/FABP and may participate in fatty acid metabolism. Extracellularly, it is both monomeric and heterooligomeric and exhibits antibacterial properties. Human S100A7 is 101 amino acids (aa) in length. It contains two EF-hand motifs (aa 13 - 48 and 50 - 85), three zinc-binding His residues, one high-affinity Ca-binding site (aa 63 - 74) and an overlapping antibacterial sequence (aa 35 - 80). There appear to be no meaningful rodent structural orthologs. Human S100A7 is 93% aa identical to human S100A15/7A, and the S100A7 gene has a duplication (S100A7B) that is 54% aa identical to S100A7.

Preparation

Produced in sheep immunized with purified, *E. coli*-derived, recombinant human S100A7 (rhS100A7; aa 1 - 101; Accession # P31151). Human S100A7 specific IgG was purified by human S100A7 affinity chromatography.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.5 mL of PBS is used, the antibody concentration will be 0.2 mg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C **in a manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody has been selected for its ability to recognize human S100A7 in direct ELISAs and Western blots. In these formats, this antibody shows approximately 5% cross-reactivity with rhS100A8.

Applications

Western blot - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect human S100A7. The detection limit for rhS100A7 is approximately 5 ng/lane under non-reducing and reducing conditions.

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human S100A7. The detection limit for rhS100A7 is approximately 0.3 ng/well.

Optimal dilutions should be determined by each laboratory for each application.

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