Biotin Conjugated Anti-S100B Antibody [PSH15-25] - Detector

HA723730B

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	ELISA(Det), ELISA
Clone number:	PSH15-25

Description: The protein encoded by this gene is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. S100 proteins are localized in the cytoplasm and/or nucleus of a wide range of cells, and involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. S100 genes include at least 13 members which are located as a cluster on chromosome 1q21; however, this gene is located at 21q22.3. This protein may function in Neurite extension, proliferation of melanoma cells, stimulation of Ca2+ fluxes, inhibition of PKC-mediated phosphorylation, astrocytosis and axonal proliferation, and inhibition of microtubule assembly. Chromosomal rearrangements and altered expression of this gene have been implicated in several neurological, neoplastic, and other types of diseases, including Alzheimer's disease, Down's syndrome, epilepsy, amyotrophic lateral sclerosis, melanoma, and type I diabetes.

Conjugate: Biotin-conjugated

Immunogen: Recombinant protein within Human S100 beta aa 1-92 (HA211252).

Positive control: Recombinant Human S100B protein (HA211252).

Subcellular location: Cytoplasm, Nucleus.

Database links: SwissProt: P04271 Human | P50114 Mouse | P04631 Rat

Recommended Dilutions:

ELISA(Det)	Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [SC57-02] to Human S100B antibody (Capture) (HA723728) and Recombinant Human S100B protein (HA211252) as the standard. The reference range value is 46.9-6,000 pg/mL.
ELISA	Use at an assay dependent concentration.

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% ProClin300.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

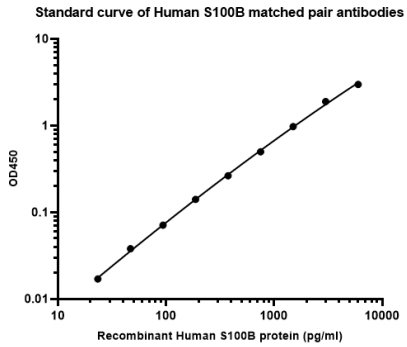

Fig1: Sandwich ELISA analysis of Human S100B matched pair antibodies

Capture: HA723728, Human S100B Rabbit mAb [SC57-02]
Detector: HA723729, Human S100B Rabbit mAb [PSH15-25]

Elisa assay was performed by coating wells of a 96-well plate with 100 µl per well of capture antibody (HA723728) diluted in carbonate/bicarbonate buffer, at a concentration of 5 µg/ml overnight at 4℃. Wells of the plate were washed, blocked with 150 µl 0.05% tween-20 1% BSA blocking buffer, and incubated with serial diluted S100B protein (HA211252) starting from 6,000 pg/ml to 0 pg/ml and detect antibody (HA723729, Biotin, 0.2 µg/ml) for 1 hour at 30℃ with shaking. Then the plate was washed and incubated with 100 µl per well of SA-HRP for 0.5 hour at 30℃ with shaking. Detection was performed using an Ultra TMB Substrate for 10 minutes at room temperature in the dark. The reaction was stopped with sulfuric acid and absorbances were read on a spectrophotometer at 450 nm.

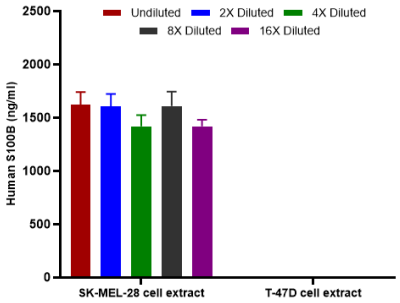

Fig2: Interpolated concentrations of native S100B in SK-MEL-28 and T-47D extract samples based on a 1,000 µg/ml extract load.

Capture: HA723728, Human S100B Rabbit mAb [SC57-02]
Detector: HA723729, Human S100B Rabbit mAb [PSH15-25]

The concentrations of S100B were measured in triplicates, interpolated from the S100B standard curve and corrected for sample dilution. Undiluted samples are SK-MEL-28 extract 0.25% and T-47D extract 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=3). The mean S100B concentration was determined to be 1,536 ng/ml in SK-MEL-28 extract and undetectable in T-47D extract.

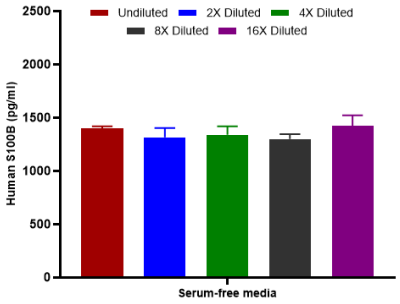

Fig3: Interpolated concentrations of spiked S100B in serum-free media samples.

Capture: HA723728, Human S100B Rabbit mAb [SC57-02]
Detector: HA723729, Human S100B Rabbit mAb [PSH15-25]

The concentrations of S100B were measured in duplicates, interpolated from the S100B standard curves and corrected for sample dilution. Undiluted samples are as follows: serum-free media 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).

Background References

1. Miyamoto Y et al. Involvement of the Tyro3 receptor and its intracellular partner Fyn signaling in Schwann cell myelination. Mol Biol Cell 26:3489-503 (2015).
2. Gondo A et al. Sustained Down-regulation of -Dystroglycan and Associated Dysfunctions of Astrocytic Endfeet in Epileptic Cerebral Cortex. J Biol Chem 289:30279-88 (2014).