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Product Information

Anti-S100A10 antibody produced in rabbit

IgG fraction of antiserum, buffered aqueous solution

Product Number SAB4200736

Product Description

Anti-S100-A10 is produced in rabbit using as immunogen a synthetic peptide corresponding to a sequence at the N-terminus of human S100-A10 (GenelD 6281), conjugated to KLH. Whole antiserum is purified using protein A immobilized on agarose to provide the IgG fraction of antiserum.

Anti-S100-A10 recognizes human S100-A10. The antibody may be used in various immunochemical techniques including Immunoblotting (~11 kDa) and Immunohistochemistry. Detection of the S100A10 band by Immunoblotting is specifically inhibited by the immunizing peptide.

S100-A10, also known as Calpactin I light chain, S100 calcium-binding protein A10, p11 or Cellular ligand of annexin II, is a member of the S100 family of proteins containing two EF-hand calcium-binding motifs. S100-A10 functions as the regulatory subunit of Annexin II (ANX2) to generate the active heterotetramer ANX2/p11 (ANX2T). S100-A10 plays a role in malignancy by allowing metastatic prostate cancer and multiple myeloma cells to reach adhesion and growth at the bone marrow microenvironment. 1-3 Up-regulation of S100-A10 has been reported in several cancers including renal cell carcinoma, squamous non-cell lung cancer, anaplastic large cell lymphoma and pediatric intracranial ependymom. ¹⁻³ Experimental evidence implicates \$100-A10 involvement in the mechanism of action of antidepressant drugs and electroconvulsive seizures due to its interaction with specific serotonin receptors.4-6

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline pH 7.4, containing 15 mM sodium azide as a preservative.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at –20 °C. For continuous use, store at 2–8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working dilution of 1:500–1:1000 is recommended using human epidermoid carcinoma A431 cell line extract.

Immunohistochemistry: a working dilution of 1:500–1:1000 is recommended using heat-retrieved formalin-fixed, paraffin-embedded human pancrease carcinoma sections.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

References

- Gopalakrishnapillai A., et al., PLoS One., 10, e0140564 (2015).
- Shiozawa Y., et al., J Cell Biochem., 105, 370-80 (2008).
- 3. D'Souza S., et al., Blood, 119, 1888-96 (2012).
- Svenningsson P., et al., Nat Rev Neurosci., 14, 673-80 (2013).
- 5. Warner-Schmidt JL., et al., *Biol Psychiatry*, **68**, 528-35 (2010).
- 6. Guo J., et al., Sci Rep., 6, 17029 (2016).

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