

Product Information

Anti- Claudin-3

produced in rabbit, affinity isolated antibody

Catalog Number **SAB4200607**

Product Description

Anti-Claudin-3 is produced in rabbit using as immunogen a synthetic peptide corresponding to an internal sequence of rat Claudin-3 (GenelD: 65130), conjugated to KLH. The corresponding sequence differs by a single amino acid in mouse, and by four amino acids in human. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-Claudin-3 recognizes human and rat Claudin-3. The antibody may be used in various immunochemical techniques including immunoblotting and immunohistochemistry. Detection of the claudin-3 band by immunoblotting is specifically inhibited by the immunizing peptide.

The claudins (CLDNs) family is composed of 24 transmembrane proteins exhibiting tissue specificity and involvement in epithelial and endothelial cells tight junctions structure. The CLDNs are strictly necessary for the regulation of cell proliferation, differentiation, polarization, and epithelial compartmentalization. Their expression profiles and barrier-function differ among the family members. Interestingly, these proteins are abnormally regulated in several human cancers. In particular, claudin-3 (CLDN3) and claudin-4 (CLDN4) are frequently overexpressed in several neoplasias, including ovarian, breast, pancreatic, and prostate cancers.¹ Interestingly, CLDN3 and CLDN4 mediate interactions with other cells *in vivo* that restrain growth and metastatic potential by sustaining expression of E-cadherin and limiting β -catenin signaling.² Thus, CLDN3 represents a promising target for cancer detection, diagnosis and therapy.

Reagent

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

Antibody Concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

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

Storage/Stability

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 concentration of 1-2 μ g/mL is recommended using A549 cells extracts.

Immunohistochemistry: a working concentration of 5-10 μ g/mL is recommended using formalin-fixed, paraffin-embedded rat intestine/duodenum sections.

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

References

1. Morin, P.J., *Cancer Res.*, **65**, 9603-9606 (2005).
2. Shang, X., et al., *Neoplasia*, **14**, 974-985 (2012).

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