

## Product Information

### Anti-Coronin-1C (C-terminal region)

produced in rabbit, affinity isolated antibody

Product Number **SAB4200117**

#### Product Description

Anti-Coronin-1C (C-terminal region) is developed in rabbit using as the immunogen a synthetic peptide corresponding to a sequence at the C-terminal of human coronin-1C (GeneID 23603), conjugated to KLH. The corresponding sequence is identical in mouse and rat coronin-1C. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-Coronin-1C (C-terminal region) specifically recognizes human and mouse coronin-1C. The antibody can be used in several immunochemical techniques including immunoblotting (~55 kDa) and immunofluorescence. Detection of the coronin-1C band by immunoblotting is specifically inhibited by the coronin-1C immunizing peptide.

Coronin-1C (also known as CORO1C, Coronin-3, HCRNN4) belongs to the coronin family of WD40 repeat-containing proteins. Coronins appear to function primarily in association with the membrane cytoskeleton through interaction with F-actin and the Arp2/3 complex.<sup>1</sup> They localize to submembrane areas and regulate cell motility and cytoskeletal rearrangement. Coronin-1C is ubiquitously expressed and co-localizes with F-actin, and thus, is thought to be important in cytokinesis, cell motility, endocytosis, axonal growth, wound healing, and signal transduction by altering actin dynamics.<sup>2-4</sup> In fibroblasts it localized both in the cytosol and in the submembrane cytoskeleton, especially at lamellipodia and membrane ruffles.<sup>3</sup> Coronin-1C shows a high degree of phosphorylation, which is likely to regulate its localization. Coronin-1C is abundantly expressed in the central nervous system (CNS) during embryogenesis and first postnatal stages, and in primary oligodendrocytes. Its expression has been shown to decrease in the adult brain, except in hippocampal neurons and cerebellar Purkinje cells.<sup>5</sup> In neurons, coronin-1C is localized in outgrowing neurites. Coronin-1C is expressed in diffuse gliomas and is related to malignancy.

#### 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: ~1.5 mg/mL

#### Precautions and Disclaimer

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

Store at -20 °C. For continuous use, the product may be stored at 2-8 °C for up to one month. For extended storage, freeze in working aliquots at -20 °C. Storage in "frost-free" freezers is also not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

#### Product Profile

**Immunoblotting:** a working antibody concentration of 1.5-3.0 µg/mL is recommended using A431 cell extract.

**Immunofluorescence:** a working antibody concentration of 5-10 µg/mL is recommended using NIH3T3 cells.

**Note:** In order to obtain best results in various techniques and preparations, it is recommended to determine optimal working dilutions by titration.

## References

1. Rybakin, V., and Clemens, C.S., *Bioessays*, **27**, 625-632 (2005).
2. Iizaka, M., et al., *Cytogenet. Cell Genet.*, **88**, 221-224 (2000).
3. Spoerl, Z., et al., *J. Biol. Chem.*, **277**, 48858-48867 (2002).
4. Rosentreter, A., et al., *Exp. Cell Res.*, **313**, 878-895 (2007).
5. Hasse, A., et al., *Eur. J. Neurosci.*, **21**, 1155-1168 (2005).
6. Thal, D.R., et al., *J. Pathol.*, **214**, 415-424 (2008).

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