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# **Product Information**

Anti-Pan-Cadherin antibody, Mouse monoclonal clone CH-19, purified from hybridoma cell culture

Product Number SAB4200731

# **Product Description**

Anti-Pan-Cadherin antibody, Mouse monoclonal (mouse IgG1 isotype) is derived from the CH-19 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from a BALB/c mouse immunized with synthetic peptide corresponding to the C-terminus of chicken N-Cadherin with an extra N-terminal lysine residue coupled with KLH. The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Product Number ISO2. The antibody is purified from culture supernatant of hybridoma cells.

Monoclonal Anti-Pan-Cadherin recognizes Cadherin from human, mouse<sup>1,2</sup>, monkey, bovine, chicken, rat<sup>3</sup>, ferret<sup>4</sup>, canine<sup>5</sup>, rabbit, pig guinea pig, hamster, cat, frog, snake and psammomys origin. Monoclonal Anti-Pan-Cadherin is reactive against a highly conserved sequence at the cytoplasmic C-terminal of N-Cadherin protein. Monoclonal Anti-Pan-Cadherin is recommended to use in various immunochemical assays, including Immunoblot (~135kDa), Immunofluorescence and Immunohistochemistry<sup>2-3</sup>.

Cadherins are members of a multigene family of single chain glycoprotein receptors which mediate Ca<sup>++</sup>dependent cell-cell adhesion<sup>6</sup>. Cadherins family includes more than 100 family members all sharing characteristic extracellular cadherin repeats (ECs)<sup>7</sup>. In addition, Cadherins' function extends to multiple aspects of tissue morphogenesis, including cell recognition and sorting, boundary formation and maintenance, coordinated cell movements and the induction and maintenance of structural and functional cell and tissue polarity<sup>8</sup>. Cadherins have been implicated in the formation and maintenance of diverse tissues and organs ranging from polarization of simple epithelia to mechanically linking hair cells in the cochlea and providing an adhesion code for neural circuit formation during wiring of the brain<sup>8</sup>.

Defective expression of Cadherins is suggested to contribute to a wide variety of diseases including the archetypal disruption of normal tissue architecture and metastatic cancer<sup>9</sup>.

# 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 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 concentration of 0.125–0.25  $\mu$ g/mL is recommended using HeLa cell extract.

<u>Immunofluorescence</u>: a working concentration of  $5-10 \mu$ g/mL is recommended using HeLa cells.

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

#### References

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