3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

# **Product Information**

Monoclonal anti-CHD1, clone 2F11H5 produced in rat, purified from hybridoma cell culture

Catalog Number SAB4200654

### **Product Description**

Monoclonal Anti-CHD1 (rat IgG2a isotype) is derived from the hybridoma 2F11H5 produced by the fusion of mouse myeloma cells and lymph node cells from rat immunized with a synthetic peptide corresponding to a sequence at the C-terminal region of human CHD1 (Gene ID: 1105). The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti-CHD1 recognizes human CHD1. The antibody may be used in various immunochemical techniques including immunofluorescence, flow cytometry, immunoblotting and immunohistochemistry.<sup>1</sup>

CHD1 (Chromodomain-helicase-DNA-binding protein 1) is an ATP-dependent chromatin-remodeling factor. The CHD family of proteins is characterized by the presence of chromo (chromatin organization modifier) domains and SNF2-related helicase/ATPase domains. CHD genes alter gene expression possibly by modification of chromatin structure thus altering access of the transcriptional apparatus to its chromosomal DNA template. CHD1 is required for maintenance of open chromatin and pluripotency in embryonic stem cells. <sup>1-4</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 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**

Immunofluorescence: a working concentration of 20 μg/mL is recommended using human HeLa cells.

Flow Cytometry: a working dilution of 5-10 μg /test 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

- Yoshimura, S., et al., Hybridoma (Larchmt), 29, 237-240 (2010).
- 2. Marfella, C.G, and Imbalzano, A.N., *Mutat. Res.*, **618**, 30-40 (2007).
- 3. Ho, L., and Crabtree, G.R., *Nature*, **463**, 474-484 (2010).
- 4. Hauk, G., and Bowman, G.D., *Curr. Opin. Struct. Biol.*, **21**, 719-727 (2011).

GG,AI,PHC 11/15-1