### Anti-CENP-A Catalog# SMC-202D Size: 100µg

## StressMarq Biosciences Inc.

| Orders | • | sales@stressmarq.com |
|--------|---|----------------------|
| Tel:   | • | +1 250 294 9065      |
| Fax:   | • | +1 250 294 9025      |
| Email  | • | info@stressmarq.com  |
| Web    | • | www.stressmarq.com   |

PO Box 55036 Cadboro Bay 3825 Cadboro Bay Rd, Victoria, BC V8N 4G0, Canada

This product is for *in vitro* research use only and is not intended for use in humans or animals

| Product                      | Mouse Anti-CENP-1 Monoclonal<br>Antibody             |
|------------------------------|--|
| Clone                        | 5A7-2E11   |
| Immunogen                    | Synthetic peptide                                    |
|                              | corresponding to a portion of                        |
|                              | human CENP-A.  |
| Host and Subclass            | Mouse, IgG1  |
| Cited Applications           | WB   |
| Specificity                  | Recognizes human CENP-A.<br>Detects bands of ~18kDa. |
| Species cross-<br>reactivity | Human, others not tested                             |
| Format                       | In PBS containing 0.09% sodium                       |
|                              | azide in 50% glycerol. Protein                       |
|                              | G purified.  |
| Concentration and            | 1.0mg/mL;  |
| working dilution             | 1:1000 (WB)  |
| Storage and                  | -20°C; 1 year+; shipped on                           |
| stability                    | cold packs or ambient                                |

#### Scientific Background

A replicated chromosome includes two kinetochores that control chromosome segregation during mitosis. The Centromere Protein-A, CENP-A, is a Histone H3-like protein that contains a C-terminal H3-like domain, which is required for centromere localization of CENP-A, and an antigenic N-terminal domain.

CENP-A, originally isolated from HeLa cells, is essential for kinetochore targeting of CENP-C. In the presence of DNA CENP-A forms an octa-meric complex with histones H4, H2A, H2B. CENP-A specifically localizes to active centromeres and is a component of specialized centromeric nucleosomes, on which kinetochores are assembled. CENP-A is essential for nucleosomal packaging of centromeric DNA at interphase and functions as a centromere formation marker on the chromosome.

#### Selected References

1. Rieder C.L., et al. (1998) Trends Cell Biol. 8: 310-318.

- 2. Choo K.H. (2000) Trends Cell Biol. 10: 182-188.
- 3. Muro Y., et al. (2000) Clin. Exp. Immunol. 120: 218-223.

4. Howman E.V., et al. (2000) Proc. Natl. Acad. Sci. USA 97:

1148-1153.

### 

A in 20µg of U2OS cell lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

# Material Safety Data Sheet

Anti-CENP-A (Monoclonal Antibody) SMC-202

This product is for in vitro research use only and is not intended for use in humans or animals

The below information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. StressMarq shall not be held liable for any damage resulting from handling or from contact with the above product. See the Technical Specification, Packing Slip, Invoice, and Product Catalogue for additional terms and conditions of sale.

#### **Hazardous Ingredients**

The physical, chemical and toxicological properties of these components have not been fully investigated. It is recommended that all laboratory personnel follow standard laboratory safety procedures when handling this product. Safety procedures should include wearing OSHA approved safety glasses, gloves and protective clothing. Direct physical contact with this product should be avoided.

Known Hazardous Components<br/>Sodium AzideCAS Number<br/>26628-22-8

Percent 0.09

#### Physical Data

This product consists of mouse immunoglobulin in PBS containing 0.09% sodium azide in 50% glycerol shipped on gel packs. The physical properties of this product have not been investigated thoroughly.

#### Fire and Explosion Hazard and Reactivity Data

NOT APPLICABLE

#### **Toxicological Properties**

May be harmful by inhalation, ingestion, or skin absorption. The toxicological properties of this product have not been investigated thoroughly. Exercise due caution.

#### **Preventative Measures**

Wear chemical safety goggles and compatible chemical-resistant gloves. Avoid inhalation, contact with eyes, skin or clothing.

#### Spill and Leak Procedures

Observe all federal, state and local environmental regulations.

- Wear protective equipment.
- Absorb on sand or vermiculite and place in closed containers for disposal.
- Dispose or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

#### **First Aid Measures**

- If swallowed, wash out mouth with water, provided person is conscious. Call a physician.
- In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If a rash or other irritation develops, call a physician.
- If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
- In case of eye contact, flush with copious amounts of water for at least 15 minutes while separating the eyelids with fingers. Call a physician.