Anti-PUMA (C-T) Catalog# SPC-166C/D Size: 25/100µl

StressMarq Biosciences Inc.

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

| Product | Rabbit anti-PUMA (C-terminal) antibody; polyclonal |
|------------------------------------|--|
| Clone | N/A |
| Immunogen | C-terminal amino acids of human PUMA |
| Host and Subclass | Rabbit polyclonal |
| Cited Applications | WB, ICC |
| Specificity | Detects a 23 kD protein corresponding to the molecular mass of PUMA on SDS PAGE immunoblots. 16kd band may be seen in some instances, possibly corresponding to PUMAB. |
| Species cross- reactivity | Human, Mouse, Rat |
| Format | Affinity purified in PBS with 0.02% Sodium Azide |
| Concentration and working dilution | 1.0mg/mL; Suggested dilution 1: 1000 for Western blots; 1:100 for ICC. |
| Storage and stability | -20°C; 1 year+; shipped on cold packs or ambient |

Scientific Background

Apoptosis is related to many diseases and development. The p53 tumor-suppressor protein induces apoptosis through transcriptional activation of several genes. A novel p53 inducible pro-apoptotic gene was identified recently and designated PUMA (for p53 upregulated modulator of apoptosis) and bbc3 (for Bcl-2 binding component 3) in human and mouse (1-3). PUMA/bbc3 is one of the pro-apoptotic Bcl-2 family members including Bax and Noxa, which are also transcriptional targets of p53. The PUMA gene encodes two BH3 domain-containing proteins termed PUMA- α and PUMA- β (1). PUMA proteins bind Bcl-2, localize to the mitochondria, and induce cytochrome c release and apoptosis in response to p53. PUMA may be a direct mediator of p53-induced apoptosis.

Selected References

Tel: Fax:

Web

Nakano K., Vousden K.H. (2001) *Mol Cell*. 7(3): 683-94.
Yu J., Zhang L., Hwang P.M., Kinzler K.W., Vogelstein B. (2001) *Mol Cell*. 7(3): 673-82.

3. Han J., Flemington C., Houghton A.B., Gu Z., Zambetti G.P., Lutz R.J., Zhu L., Chittenden T. (2001) *Proc Natl Acad Sci U S A*. 98(20): 11318-23.

Certificate of Analysis

1 μ g/mL of SPC-166 was sufficient for detection of PUMA in 20 μ g of human K562 cell lysate by colorimetric immunoblot analysis using Goat anti-rabbit lgG:HRP as the secondary antibody.

Material Safety Data Sheet Anti-PUMA (Polyclonal Antibody) SPC-166

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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 Sodium Azide CAS Number 26628-22-8 Percent 0.02

Physical Data

This product consists of rabbit immunoglobulin in PBS containing 0.02% 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.

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