

Anti-RYR1 (Ryanodine receptor 1) Polyclonal Antibody

Cat. #: 60B512

Description:

RYR1 (Ryanodine receptor 1) communicates between transverse-tubules and sarcoplasmic reticulum. Ryanodine is an alkaloid that binds to the Ca-release channel in junctional SR and modulates its activity. Contraction of skeletal muscle is triggered by release of calcium ions from SR following depolarization of T-tubules. The calcium release channel activity resides in the C-terminal region of RYR1 while the remaining part of the protein constitutes the 'foot' structure spanning the junctional gap between the SR and the T-tubule. It is possible that the foot structure interacts with the cytoplasmic region of the dihydropyridine receptor. Defects in RYR1 are a cause of malignant hyperthermia (MH). MH is an autosomal dominant pharmacogenetic disorder of skeletal muscle and is one of the main causes of death due to anesthesia.

Immunogen/Specificity:

Polyclonal antibody produced in rabbits immunizing with a synthetic peptide corresponding to C-terminal residues of human RYR1 (Ryanodine receptor 1)

References

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Sun, J., et al, Proc. Natl. Acad. Sci. U.S.A. 98 (20), 11158-11162 (2001)
Gillard, E.F., et al, Genomics 11 (3), 751-755 (1991)
Quane, K.A., et al, Br J Anaesth 79 (3), 332-337 (1997)
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Manning, B.M., et al, Am. J. Hum. Genet. 62 (3), 599-609 (1998)
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Gencik, M., et al, Hum. Mutat. 15 (1), 122 (2000)

Clone Number:

Isotype:

Species: Human

Storage and Stability: at -20°C

Storage buffer:

This antibody is stored in PBS, 0.01% sodium azide and 50% glycerol.

Preparation:

Purified by antigen-specific affinity chromatography.

Applications :

ELISA

Western Blotting (1 µg/ml for 2hrs)