

Datasheet: OBT1818

BATCH NUMBER 168606

Description:	MOUSE ANTI HUMAN RYANODINE RECEPTOR
Specificity:	RYANODINE RECEPTOR
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	RYR.1 (G-1)
Isotype:	IgG2b
Quantity:	50 µg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/500
Immunohistology - Frozen	▪			1/100
ELISA	▪			1/1000
Immunofluorescence (1)	▪			1/100
Immunoblotting	▪			1/100

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

(1) Use indirect immunofluorescence. Visualization by confocal microscopy is required, as detection by standard fluorescent microscopy will not be adequate to detect the RyR. Additionally, fluorescent, not enzymatic, detection is required. Due to the intensity of confocal lasers, use of an anti-fading agent, such as DABCO, is strongly recommended.

Target Species

Human

Species Cross Reactivity

Reacts with: Mouse, Dog, Bovine, Pig, Rat

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form	Purified IgG - liquid
Preparation	Antibody purified from ascites
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.01% Sodium azide
Approx. Protein Concentrations	IgG concentration 0.5 mg/ml
Immunogen	Short synthetic polypeptide corresponding to the C-terminal domain of the ryanodine receptor.
External Database Links	<p>UniProt: P21817 Related reagents</p> <p>Entrez Gene: 6261 RYR1 Related reagents</p>
Synonyms	RYDR
RRID	AB_2183191
Specificity	<p>Mouse anti Human Ryanodine Receptor antibody, clone RYR-1 recognizes the human ryanodine receptor 1, also known as Skeletal muscle calcium release channel or skeletal muscle ryanodine receptor. Ryanodine receptor 1 is a large 5038 amino acid ~500 kDa multi pass sarcoplasmic reticulum associated transmembrane protein containing three B30.2/SPRY domains and five MIR domains. Mouse anti Human Ryanodine Receptor antibody, clone RYR-1 recognizes an epitope within the C-terminal cytoplasmic domain of the ryanodine receptor (UniProt: P21817).</p> <p>Ryanodine receptors have been shown to play critical roles in the intracellular Ca²⁺ signaling occurring during cell activation in muscle cells and non-muscle cells. Mouse anti Human Ryanodine Receptor antibody, clone RYR-1 reacts with ryanodine receptor isolated from a variety of cell types (e.g. lymphocytes, macrophages, granulocytes, fibroblasts, epithelial, endothelial cells, skeletal muscle, cardiac muscle and brain tissues). Defects in the ryanodine receptor 1 gene are associated with malignant hyperthermia (Gillard <i>et al.</i> 1992), central core disease of muscle (Quane <i>et al.</i> 1993) and certain congenital myopathies (Monnier <i>et al.</i> 2000).</p>
Storage	<p>This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/OBT1818 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP

Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL \(MCA691\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
----------------------------------	---	------------------	---	---------------	---

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

'M406017:220916'

Printed on 16 Mar 2025