

Datasheet: OBT1818

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.
Product Form	Purified IgG - liquid
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**

UniProt:

[P21817](#) [Related reagents](#)

Entrez Gene:

[6261](#) RYR1 [Related reagents](#)

Synonyms

RYDR

Specificity

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](#)).

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 *et al.* 1992](#)), central core disease of muscle ([Quane *et al.* 1993](#)) and certain congenital myopathies ([Monnier *et al.* 2000](#)).

Storage

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

**Health And Safety
Information**

Material Safety Datasheet documentation #10040 available at:
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Human Anti Mouse IgG2b (HCA038...)	FITC , HRP

Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®549](#),
[DyLight®649](#), [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
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