

## Datasheet: OBT1818

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

## Product Details

**RRID** AB\_2183191

### 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](http://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 Ca<sup>2+</sup> 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.

---

**Guarantee**

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

Human Anti Mouse IgG2b (HCA038...) [FITC](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@680](#),  
[DyLight@800](#), [FITC](#), [HRP](#)

## Recommended Negative Controls

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

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
----------------------------------	---	------------------	---	---------------	---

'M345331:190125'

Printed on 20 May 2019

---

© 2019 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)