

Datasheet: 4670-1725P

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|----------------------|--------------------------------------|
| Description: | MOUSE ANTI GLUCOSE TRANSPORTER 4:HRP |
| Specificity: | GLUCOSE TRANSPORTER 4 |
| Other names: | GLUT4 |
| Format: | HRP |
| Product Type: | Monoclonal Antibody |
| Clone: | 1F8 |
| Isotype: | IgG1 |
| Quantity: | 0.1 mg |

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 |
|----------------------------|-----|----|----------------|--------------------|
| Immunohistology - Frozen | ▪ | | | |
| Immunohistology - Paraffin | | | ▪ | |
| ELISA | | | ▪ | |
| Immunoprecipitation | | | ▪ | |
| Western Blotting | ▪ | | | 1/100 - 1/1000 |
| Immunofluorescence | | | ▪ | |

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 the appropriate negative/positive controls.

| | |
|---------------------------------------|--|
| Target Species | Rat |
| Species Cross Reactivity | Reacts with: Mouse, Monkey, Rabbit, Human, Pig Does not react with: Dog N.B. Antibody reactivity and working conditions may vary between species. |
| Product Form | Purified IgG conjugated to Horseradish Peroxidase (HRP) - liquid |
| Preparation | Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant |
| Buffer Solution | Phosphate buffered saline |
| Preservative Stabilisers | 0.01% Thiomersal HRP Stabiliser (BUF052A) |
| Approx. Protein Concentrations | IgG concentration 1.0mg/ml |

Immunogen

Partially purified vesicles containing insulin-responsive glucose transporter 4.

External Database**Links****UniProt:**

[P19357](#) [Related reagents](#)
[P14672](#) [Related reagents](#)
[P14142](#) [Related reagents](#)

Entrez Gene:

[25139](#) Slc2a4 [Related reagents](#)
[6517](#) SLC2A4 [Related reagents](#)
[20528](#) Slc2a4 [Related reagents](#)

Synonyms

Glut4, Glut-4, GLUT4

Specificity

Mouse anti glucose transporter 4 antibody, clone 1F8 originally raised against rat intracellular low density microsomes ([James et al. 1987](#)) recognizes an epitope in the cytoplasmic region of Glucose transporter 4 (GLUT4), an insulin-regulated facilitative glucose transporter found in adipose tissue and striated muscle. When stimulated by insulin, GLUT4 translocates from intracellular stores to the cell surface, facilitating passive diffusion of circulating glucose into muscle and fat cells. GLUT4 is also stimulated to locate to the cell surface by muscle contraction, particularly in cardiac muscle ([James et al. 1988](#)).

Mouse anti glucose transporter 4 antibody, clone 1F8 has been used successfully to demonstrate the localization of GLUT4 to the basolateral side of ductal structures in the rat submandibular salivary gland in formalin fixed, paraffin embedded material ([Cetik et al. 2014](#)).

References

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13. Spargo, F.J. *et al.* (2007) Dysregulation of muscle lipid metabolism in rats selectively bred for low aerobic running capacity. [Am J Physiol Endocrinol Metab. 292: E1631-6.](#)

14. Cetik, S. *et al.* (2014) Expression and Localization of Glucose Transporters in Rodent Submandibular Salivary Glands. [Cell Physiol Biochem. 33: 1149-1161.](#)

15. de Laat, M.A. *et al.* (2015) AICAR administration affects glucose metabolism by upregulating the novel glucose transporter, GLUT8, in equine skeletal muscle. [Vet J. 205 \(3\): 381-6.](#)

16. Lee, Y-S. *et al.* (2015) Honokiol, magnolol, and a combination of both compounds improve glucose metabolism in high-fat diet-induced obese mice [Food Sci Biotech. 24 \(4\): 1467-74.](#)

Further Reading 1. Berger, J. *et al.* (1989) Decreased expression of the insulin-responsive glucose transporter in diabetes and fasting. [Nature. 340 \(6228\): 70-2.](#)

Storage Store at +4°C. DO NOT FREEZE.
This product should be stored undiluted. 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 #10131 available at:
10131: <https://www.bio-rad-antibodies.com/uploads/MSDS/10131.pdf>

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'M246132:140324'

Printed on 05 May 2018

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