

Parvovirus B19 (R92F6)

Mouse anti-Parvovirus B19 Monoclonal Antibody (Clone R92F6)

REFERENCES AND PRESENTATIONS¹

- **ready-to-use (manual or LabVision AutoStainer)**
MAD-000476QD-3
MAD-000476QD-7
MAD-000476QD-12
- **Ready-to-use (MD-Stainer)²**
MAD-000476QD-3/V
MAD-000476QD/V
- **concentrated**
MAD-000476Q - 1:200 recommended dilution

COMPOSITION:

Anti-Parvovirus B19 mouse monoclonal antibody purified from serum and prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide

INTENDED USE : Immunohistochemistry (IHC) on paraffin embedded tissues. Not tested on frozen tissues or Western-Blotting

CLONE: R92F6

Ig ISOTYPE: Mouse IgG1

Immunogen: Amino acids 328-344 of the VP2 protein of the viral capsid

SPECIES REACTIVITY: In vitro diagnostics in humans. Not tested in other species

DESCRIPTION AND APPLICATIONS:

Parvovirus B19 is one of the smallest viruses (20 kDa), whose nucleic acid is linear single-stranded DNA of negative polarity and without lipoprotein envelope.

The viral genome encodes three proteins: the non-structural protein NS1 and two viral capsid proteins, VP1 and VP2. The minor capsid protein VP1 has the same sequence of amino acids as VP2 plus 227 amino acids in the amino-terminus region, the VP1 unique region (VP1u). Recently, the phospholipase A2 (sPLA2) motif has been identified in VP1u in members of the *Parvoviridae* family, including B19, classified as an erythrovirus because of its ability to invade erythrocyte precursors in the bone marrow.

Parvovirus B19 is a common, self-limiting, and usually benign behavioral virus that causes erythema infectiosum, also known as "the fifth disease".

Acute infection in pregnant women causes B19 infection in the fetus.

The fetal infection can be asymptomatic or cause acute anemia, generalized edema, congestive heart failure, myocarditis, non-hydrops intrauterine fetal death or non-immune hydrops fetalis, and death depending on the time of infection.

This antibody specifically recognizes the cells infected with Parvovirus B19 and is useful in the diagnosis of non-immune hydrops fetalis along with molecular techniques.

IHC POSITIVE CONTROL: Tissue section from placenta with Parvovirus B19 infection.

VISUALIZATION: Nuclear and cytoplasmic.

IHC RECOMMENDED PROCEDURE:

- 4µm thick section should be taken on charged slides; dry overnight at 60°C
- Deparaffinise, rehydrate and HIER (heat induced epitope retrieval) – boil tissue in the Pt Module using Vitro S.A EDTA buffer pH8³ for 20 min at 95°C. Upon completion rinse with 3-5 changes of distilled or deionised water followed by cooling at RT for 20 min
- Endogenous peroxidase block - Blocking for 10 minutes at room temperature using peroxidase solution (ref. MAD-021540Q-125)
- Primary antibody: incubate for 10 minutes [The antibody dilution (when concentrated) and protocol may vary depending on the specimen preparation and specific application. Optimal conditions should be determined by the individual laboratory]
- For detection use Master Polymer Plus Detection System (HRP) (DAB included; ref. MAD-000237QK)
- Counterstaining with haematoxylin and final mounting of the slide

STORAGE AND STABILITY:  Stored at 2-8°C. Do not freeze.  Once the packaging has been opened it can be stored until the expiration date of the reagent indicated on the label. If the reagent has been stored under other conditions to those indicated in this document, the user must first check its correct

¹ These references are for presentation in vials of Low Density Polyethylene (LDPE) dropper. In case the products are used in automated stainers, a special reference is assigned as follows:

- / L: Cylindrical screw-cap vials (QD-3 / L, QD-7 / L, QD-12 / L).

- / N: Polygonal screw-cap vials (QD-3 / N, QD-7 / N, QD-12 / N).

For different presentations (references / volumes) please contact the supplier.

² For Technical specifications for MD-Stainer, please contact your distributor.

³ Ref: MAD-004072R/D



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performance taking into account the product warranty is no longer valid.

WARNINGS AND PRECAUTIONS:

1. Avoid contact of reagents with eyes and mucous membranes. If reagents come into contact with sensitive areas, wash with copious amounts of water.
2. This product is harmful if swallowed.
3. Consult local or state authorities with regard to recommended method of disposal.
4. Avoid microbial contamination of reagents.

SAFETY RECOMMENDATIONS:

This product is intended for laboratory professional use only. The product is NOT intended to be used as a drug or for domestic purposes. The current version of the Safety Data Sheet for this product can be downloaded by searching the reference number at www.vitro.bio or can be requested at regulatory@vitro.bio.

BIBLIOGRAPHY:

1. Morey AL, O'Neill HJ, Coyle PV, Fleming KA. Immunohistological detection of human parvovirus B19 in formalin-fixed, paraffin-embedded tissues. *Am J Clin Pathol*; 166(2): 105-108. 1992.
2. Agbandje M, Kajigaya S, McKenna R, Young NS, Rossmann MG. The structure of human parvovirus B19 at 8 Å resolution. *Virology*; 203: 106-115. 1994
3. Zadori Z, Szelei J, Lacoste MC, Li Y, Gariépy S, Raymond P, Allaire M, Nabi IR, Tijssen P. A viral phospholipase A2 is required for parvovirus infectivity. *Dev Cell*; 1: 291-302. 2001.
4. McCarter-Spaulding D. Parvovirus B19 in pregnancy. *J Obstet Gynecol Neonatal Nurs*. 31(1):107-112. 2002.
5. Young NS, Brown KE. Parvovirus B19. *N Engl J Med*; 350: 586-597. 2004.
6. Landolsi H, Yacoubi MT, Bouzlama L, Lahmar A, Trabelsi A, Hmissa S, Aouni M, Korbi S. Detection of the human Parvovirus B19 in nonimmune hydrops fetalis using immunohistochemistry and nested-PCR in formalin-fixed and paraffin-embedded placenta and fetal tissues. *Pathol Biol (Paris)*; 57(3):e1-7. 2009.

LABEL AND BOX SYMBOLS

Explanation of the symbols of the product label and box:

	Expiration date
	Temperature limit
	Manufacturer
	Sufficient content for <n> assays
	Catalog number
	Lot code
	Refer to the instructions of use
	Medical product for <i>in vitro</i> diagnosis.
	Material safety data sheet