

Datasheet: MCA4706

Description:	RAT ANTI MOUSE CD105
Specificity:	CD105
Other names:	ENDOGLIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	MJ7/18
Isotype:	IgG2a
Quantity:	0.25 mg

Product Details

RRID AB_2098891

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	▪			1/10 - 1/20
Immunohistology - Frozen	▪			
Immunohistology - Paraffin	▪			
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting	▪			
Functional Assays			▪	

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.

Target Species	Mouse
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 0.5mg/ml
Immunogen	Inflamed mouse skin.

**External Database
Links**

UniProt:

[Q63961](#) [Related reagents](#)

Entrez Gene:

[13805](#) Eng [Related reagents](#)

Synonyms

Edg

Specificity

Rat anti Mouse CD105 antibody, clone MJ7/18 recognizes mouse CD105, also known as Endoglin, a cell surface glycoprotein member of the TGF beta receptor complex. CD105 is a homodimer that forms a heteromeric complex with TGF beta receptors I and/or II. The complex binds TGF beta 1 and 3 efficiently, and TGF beta 2 less efficiently. It may also play a role in the binding of endothelial cells to integrins and cytoskeletal organisation. It is involved in cardiovascular development. CD105 is expressed on endothelial cells in all tissues except bone marrow and is also found in stromal cells within the connective tissue of the intestine, stomach and heart. It may be a useful marker for proliferating endothelium in tumours.

Flow Cytometry

Use 10ul of the suggested working dilution to label 1x10⁶ cells in 100ul.

References

1. Ge, A.Z. & Butcher, E.C. (1994) Cloning and expression of a cDNA encoding mouse endoglin, an endothelial cell TGF-beta ligand. [Gene. 138 \(1-2\): 201-6.](#)
2. Hallmann, R. *et al.* (1995) Novel mouse endothelial cell surface marker is suppressed during differentiation of the blood brain barrier. [Dev Dyn. 202 \(4\): 325-32.](#)
3. Bredow, S. *et al.* (2000) Imaging of tumour neovasculature by targeting the TGF-beta binding receptor endoglin. [Eur J Cancer. 36 \(5\): 675-81.](#)
4. Leguerney, I. *et al.* (2015) Molecular ultrasound imaging using contrast agents targeting endoglin, vascular endothelial growth factor receptor 2 and integrin. [Ultrasound Med Biol. 41 \(1\): 197-207.](#)
5. Crouch, E.E. *et al.* (2015) Regional and Stage-Specific Effects of Prospectively Purified Vascular Cells on the Adult V-SVZ Neural Stem Cell Lineage. [J Neurosci. 35 \(11\): 4528-39.](#)
6. Işık, S. *et al.* (2016) Intraperitoneal mesenchymal stem cell administration ameliorates allergic rhinitis in the murine model. [Eur Arch Otorhinolaryngol. Jul 5. \[Epub ahead of print\]](#)
7. Winkler, S. *et al.* (2015) Mouse white adipose tissue-derived mesenchymal stem cells gain pericentral and periportal hepatocyte features after differentiation *in vitro*, which are preserved *in vivo* after hepatic transplantation. [Acta Physiol \(Oxf\). 215 \(2\): 89-104.](#)

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

Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Goat Anti Rat IgG (STAR72...)	HRP
Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®800

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL \(MCA1212\)](#)

Recommended Useful Reagents

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025A\)](#)

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025C\)](#)

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
----------------------------------	---	------------------	---	---------------	---

'M343561:190111'

Printed on 11 Oct 2019