

## Datasheet: MCA757G

**BATCH NUMBER 153317**

<b>Description:</b>	MOUSE ANTI HUMAN CD51/CD61
<b>Specificity:</b>	CD51/CD61
<b>Other names:</b>	VITRONECTIN RECEPTOR
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	23C6
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.2 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/40 - 1/80
Immunohistology - Frozen (1)	▪			
Immunohistology - Paraffin		▪		
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	
Immunofluorescence	▪			

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

**(1)The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.**

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	Reacts with: Chicken Does not react with: Bovine, Pig, Rabbit <b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or

personal communications from the originators. Please refer to references indicated for further information.

<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Osteoclasts from osteoclastomas.
<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P06756</a> <a href="#">Related reagents</a> <a href="#">P05106</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">3685</a> ITGAV <a href="#">Related reagents</a> <a href="#">3690</a> ITGB3 <a href="#">Related reagents</a>
<b>Synonyms</b>	GP3A, MSK8, VNRA
<b>RRID</b>	AB_321468
<b>Fusion Partners</b>	Spleen cells from immunised mice were fused with cells of the mouse X63.Ag8.653 myeloma cell line.
<b>Specificity</b>	<b>Mouse anti Human CD51/CD61 antibody, clone 23C6</b> recognizes the intact complex formed between the CD51 and CD61 molecules (alpha V and beta 3 integrins). This complex binds vitronectin at the RGD sequence and can also bind fibrinogen, von Willebrand factor, thrombospondin, fibronectin, osteopontin and collagen. Mouse anti Human CD51/CD61 antibody, clone 23C6 reacts with osteoclasts, placenta, melanoma cell lines and weakly with platelets.
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	1. Horton, M.A. <i>et al.</i> (1985) Monoclonal antibodies to osteoclastomas (giant cell bone tumors): definition of osteoclast-specific cellular antigens. <a href="#">Cancer Res. 45 (11 Pt 2): 5663-9.</a> 2. Davies, J. <i>et al.</i> (1989) The osteoclast functional antigen, implicated in the regulation of

bone resorption, is biochemically related to the vitronectin receptor. [J Cell Biol. 109 \(4 Pt 1\): 1817-26.](#)

3. Simpson, A. & Horton, M.A. (1989) Expression of the vitronectin receptor during embryonic development; an immunohistological study of the ontogeny of the osteoclast in the rabbit. [Br J Exp Pathol. 70 \(3\): 257-65.](#)

4. Viertlboeck, B.C, and Göbel, T.W. (2007) Chicken thrombocytes express the CD51/CD61 integrin. [Vet Immunol Immunopathol. 119:137-41.](#)

5. Danks, L. *et al.* (2002) Synovial macrophage-osteoclast differentiation in inflammatory arthritis. [Ann Rheum Dis. 61: 916-21.](#)

6. Knowles, H.J. *et al.* (2010) Hypoxia-inducible factor regulates osteoclast-mediated bone resorption: role of angiopoietin-like 4. [FASEB J. 24: 4648-59.](#)

7. Lau, Y.S. *et al.* (2007) Cellular and humoral mechanisms of osteoclast formation in Ewing's sarcoma [Br J Cancer. 96: 1716-22.](#)

8. Lau, Y.S. *et al.* (2006) Malignant melanoma and bone resorption. [Br J Cancer. 94: 1496-503.](#)

9. Mabileau, G. *et al.* (2009) Interleukin-32 promotes osteoclast differentiation but not osteoclast activation. [PLoS One. 4:e4173.](#)

10. Whyte, L.S. *et al.* (2009) The putative cannabinoid receptor GPR55 affects osteoclast function *in vitro* and bone mass *in vivo*. [Proc Natl Acad Sci U S A. 106: 16511-6.](#)

11. Zhao W *et al.* (2015) The Gametocytes of *Leucocytozoon sabraezesi* Infect Chicken Thrombocytes, Not Other Blood Cells. [PLoS One. 10 \(7\): e0133478.](#)

12. Iseri, V.J. & Klasing, K.C. (2013) Dynamics of the systemic components of the chicken (*Gallus gallus domesticus*) immune system following activation by *Escherichia coli*; implications for the costs of immunity. [Dev Comp Immunol. 40 \(3-4\): 248-57.](#)

13. Knowles, H.J. (2017) Hypoxia-Induced Fibroblast Growth Factor 11 Stimulates Osteoclast-Mediated Resorption of Bone. [Calcif Tissue Int. 100 \(4\): 382-91.](#)

14. Larrouture, C.Q. *et al.* (2021) Loss of mutually protective effects between osteoclasts and chondrocytes in damaged joints drives osteoclast-mediated cartilage degradation via matrix metalloproteinases [bioRxiv. 01 Jan \[Epub ahead of print\].](#)

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**Storage**

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

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA757G>  
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**Regulatory**

For research purposes only

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## Related Products

## Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight@488</a> , <a href="#">DyLight@550</a> , <a href="#">DyLight@650</a> , <a href="#">DyLight@680</a> , <a href="#">DyLight@800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>

## Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

<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>
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)  
'M368923:200529'

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