

Datasheet: MCA2344EL

BATCH NUMBER 166869

| | |
|----------------------|--------------------------------------|
| Description: | MOUSE ANTI HUMAN CD221:Low Endotoxin |
| Specificity: | CD221 |
| Other names: | IGF-1 RECEPTOR |
| Format: | Low Endotoxin |
| Product Type: | Monoclonal Antibody |
| Clone: | 1H7 |
| Isotype: | IgG1 |
| Quantity: | 0.5 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 |
|--------------------------------|-----|----|----------------|--------------------|
| Flow Cytometry | ▪ | | | 1/10 |
| Immunohistology - Frozen | | | ▪ | |
| Immunohistology - Paraffin (1) | ▪ | | | 1/10 - 1/40 |
| 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.

(1)This product requires protein digestion pre-treatment of paraffin sections e.g. trypsin or pronase.

| | |
|-----------------------|---|
| Target Species | Human |
| Product Form | Purified IgG - liquid |
| Preparation | Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant |

| | |
|--|---|
| Buffer Solution | Phosphate buffered saline |
| Preservative Stabilisers | None present |
| Carrier Free | Yes |
| Endotoxin Level | <0.01 EU/μg |
| Approx. Protein Concentrations | IgG concentration 1.0 mg/ml |
| Immunogen | Purified human placental IGF-I receptor. |
| External Database Links | <p>UniProt: P08069 Related reagents</p> <p>Entrez Gene: 3480 IGF1R Related reagents</p> |
| RRID | AB_566648 |
| Fusion Partners | Spleen cells from immunized BALB/c mice were fused with cells of the SP2/0 myeloma cell line. |
| Specificity | <p>Mouse anti Human CD221 antibody, clone 1H7 recognizes human CD221, a ~155 kDa receptor tyrosine kinase, also known as Insulin-like growth factor I receptor (IGF-I Receptor). CD221 is composed of two extracellular alpha-subunits and two transmembrane beta-subunits. Clone 1H7 recognizes an epitope in the alpha subunits of CD221, demonstrated by western blotting (Li et al.1993).</p> <p>CD221 is expressed in a range of tissues, including kidney, liver, placenta, mammary gland, brain, ovary and skin.</p> <p>The ligands for CD221 include IGF-I and IGF-II, which bind to CD221 and activate tyrosine kinase activity, resulting in phosphorylation of several intracellular signaling proteins. Clone 1H7 is reported to partially block binding of IGF-I and IGF-II to CD221 (Li et al.1993).</p> |
| Flow Cytometry | Use 10μl of the suggested working dilution to label 10 ⁶ cells in 100μl |
| Histology Positive Control Tissue | Human pancreas or placenta |
| References | <ol style="list-style-type: none"> Li, S.L. <i>et al.</i> (1993) Two new monoclonal antibodies against the alpha subunit of the human insulin-like growth factor-I receptor. Biochem Biophys Res Commun. 196 (1): 92-8. Beauvais, D.M. & Rapraeger, A.C. (2010) Syndecan-1 couples the insulin-like growth factor-1 receptor to inside-out integrin activation. J Cell Sci. 123 (Pt 21): 3796-807. |

3. Krieger, C.C. *et al.* (2016) Thyrotropin/IGF-1 receptor crosstalk in Graves' ophthalmopathy pathogenesis. [J Clin Endocrinol Metab. Apr 4: jc20161315. \[Epub ahead of print\]](#)
4. van Valen, F. *et al.* (2012) A Novel Role of IGF1 in Apo2L/TRAIL-Mediated Apoptosis of Ewing Tumor Cells. [Sarcoma. 2012: 782970.](#)

| | |
|--------------------------------------|--|
| Storage | Store at -20°C only. 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. |
| Guarantee | 12 months from date of despatch |
| Health And Safety Information | Material Safety Datasheet documentation #10162 available at: https://www.bio-rad-antibodies.com/SDS/MCA2344EL 10162 |
| Regulatory | For research purposes only |

Related Products

Recommended Secondary Antibodies

| | |
|---|---|
| Rabbit Anti Mouse IgG (STAR12...) | RPE |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | Alk. Phos. , HRP |
| Goat Anti Mouse IgG (STAR76...) | RPE |
| Rabbit Anti Mouse IgG (STAR13...) | HRP |
| Goat Anti Mouse IgG (STAR70...) | FITC |
| Goat Anti Mouse IgG (H/L) (STAR117...) | Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP |
| Rabbit Anti Mouse IgG (STAR9...) | FITC |
| Goat Anti Mouse IgG (Fc) (STAR120...) | FITC , HRP |
| Goat Anti Mouse IgG (STAR77...) | HRP |

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Low Endotoxin \(MCA928EL\)](#)

| | | | | | |
|----------------------------------|---|------------------|---|---------------|---|
| 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 |
|----------------------------------|---|------------------|---|---------------|---|

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M422742:231003'

Printed on 18 Jan 2024