

Datasheet: MCA2091

**BATCH NUMBER 161999**

<b>Description:</b>	MOUSE ANTI HUMAN PLACENTAL ALKALINE PHOSPHATASE
<b>Specificity:</b>	PLACENTAL ALKALINE PHOSPHATASE
<b>Other names:</b>	PLAP
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	H17E2
<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	▪			10ug/ml
Immunohistology - Frozen (1)	▪			
Immunohistology - Paraffin		▪		
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting			▪	

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>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>	Placental membrane.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P05187</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">250</a> ALPP    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	PLAP
<b>RRID</b>	AB_2226283
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human placental alkaline phosphatase antibody, clone H17E2</b> recognizes human placental alkaline phosphatase, also known as alkaline phosphatase Regan isozyme, Alkaline phosphatase, placental type or Placental alkaline phosphatase 1. Placental alkaline phosphatase is a 535 amino acid ~67 kDa GPI-anchored transmembrane glycoprotein bearing a 22 amino acid signal peptide and a 29 amino acid pro-peptide region, cleaved to produce the mature form. Placental alkaline phosphatase is expressed in trophoblast cells of normal human placenta (<a href="#">Travers <i>et al.</i> 1984</a>), in seminomas (<a href="#">Lange <i>et al.</i> 1982</a>) and in ovarian carcinoma (<a href="#">Tholander <i>et al.</i> 1990</a>).</p> <p>Mouse anti Human placental alkaline phosphatase antibody, clone H17E2 has been widely used for immunolocalization of germ cell tumors and may also be used for the measurement of soluble placental alkaline phosphatase by ELISA.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>Histology Positive Control Tissue</b>	Placenta, seminoma
<b>References</b>	<ol style="list-style-type: none"> <li>Travers, P. &amp; Bodmer, W. (1984) Preparation and characterization of monoclonal antibodies against placental alkaline phosphatase and other human trophoblast-associated determinants. <a href="#">Int J Cancer. 33 (5): 633-41.</a></li> <li>Tucker, D.F. <i>et al.</i> (1985) Serum marker potential of placental alkaline phosphatase-like activity in testicular germ cell tumours evaluated by H17E2 monoclonal antibody assay. <a href="#">Br</a></li> </ol>

[J Cancer. 51 \(5\): 631-9.](#)

3. Epenetos, A.A. *et al.* (1984) An immunohistological study of testicular germ cell tumours using two different monoclonal antibodies against placental alkaline phosphatase. [Br J Cancer. 49 \(1\): 11-5.](#)

4. Kalofonos, H.P. *et al.* (1990) Immunolocalisation of testicular tumours using radiolabelled monoclonal antibody to placental alkaline phosphatase. [J Nucl Med Allied Sci. 34 \(4\): 294-8.](#)

5. Long, M.A. & Rossi, F.M. (2009) Silencing inhibits Cre-mediated recombination of the Z/AP and Z/EG reporters in adult cells. [PLoS One. 4:e5435.](#)

6. Carter, C.C. *et al.* (2010) HIV-1 infects multipotent progenitor cells causing cell death and establishing latent cellular reservoirs. [Nat Med. 16: 446-51.](#)

7. Wonderlich, E.R. *et al.* (2011) ADP Ribosylation Factor 1 Activity Is Required To Recruit AP-1 to the Major Histocompatibility Complex Class I (MHC-I) Cytoplasmic Tail and Disrupt MHC-I Trafficking in HIV-1-Infected Primary T Cells. [J Virol. 85: 12216-26.](#)

8. Semenov, O.V. *et al.* (2010) Multipotent mesenchymal stem cells from human placenta: critical parameters for isolation and maintenance of stemness after isolation. [Am J Obstet Gynecol. 202:193.e1-193.e13.](#)

9. Göhner, C. *et al.* (2015) A New Enzyme-linked Sorbent Assay (ELSA) to Quantify Syncytiotrophoblast Extracellular Vesicles in Biological Fluids. [Am J Reprod Immunol. 73 \(6\): 582-8.](#)

10. Fiskens, J. *et al.* (1989) Serum placental-like alkaline phosphatase (PLAP): a novel combined enzyme linked immunoassay for monitoring ovarian cancer. [J Clin Pathol. 42 \(1\): 40-5.](#)

11. Orozco AF *et al.* (2009) Placental release of distinct DNA-associated micro-particles into maternal circulation: reflective of gestation time and preeclampsia. [Placenta. 30 \(10\): 891-7.](#)

12. Dankers, P.Y.W. *et al.* (2015) Convenient formulation and application of a supramolecular ureido-pyrimidinone modified poly(ethylene glycol) carrier for intrarenal growth factor delivery [European Polymer Journal. 72: 484-93.](#)

13. Dragovic, R.A. *et al.* (2013) Multicolor flow cytometry and nanoparticle tracking analysis of extracellular vesicles in the plasma of normal pregnant and pre-eclamptic women. [Biol Reprod. 89 \(6\): 151.](#)

14. Fitzgerald, W. *et al.* (2018) Extracellular vesicles generated by placental tissues *ex vivo*: A transport system for immune mediators and growth factors. [Am J Reprod Immunol. 80 \(1\): e12860.](#)

---

**Storage**

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

---

**Guarantee**

12 months from date of despatch

---

**Health And Safety Information**

Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2091>  
10040

## 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>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</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>

### 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>
----------------------------------	---	------------------	---	---------------	---

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)

'M383643:210513'

Printed on 19 Jan 2024