Datasheet: MCA2091

BATCH NUMBER 160823

Description:	MOUSE ANTI HUMAN PLACENTAL ALKALINE PHOSPHATASE
Specificity:	PLACENTAL ALKALINE PHOSPHATASE
Other names:	PLAP
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	H17E2
Isotype:	IgG1
Quantity:	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.

	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.**

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	0.09% Sodium Azide
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Placental membrane.
External Database Links	**UniProt:** P05187 Related reagents **Entrez Gene:** 250 ALPP Related reagents
Synonyms	PLAP
RRID	AB_2226283
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
Specificity	**Mouse anti Human placental alkaline phosphatase antibody, clone H17E2** 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 (Travers *et al.* 1984), in seminomas (Lange *et al.* 1982)and in ovarian carcinoma (Tholander *et al.* 1990). Mouse anti Human placental alkaline phosphatase antibody, clone H17E2 has been widely used in immunolocalization studies of germ cell tumors and may also be used for the measurement of soluble placental alkaline phosphatase by ELISA.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
Histology Positive Control Tissue	Placenta, seminoma
References	1. Travers, P. & Bodmer, W. (1984) Preparation and characterization of monoclonal antibodies against placental alkaline phosphatase and other human trophoblast-associated determinants. Int J Cancer. 33 (5): 633-41. 2. Tucker, D.F. *et al.* (1985) Serum marker potential of placental alkaline phosphatase-like activity in testicular germ cell tumours evaluated by H17E2 monoclonal antibody assay. Br

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. Fisken, 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	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.
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
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	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 (STAR77...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

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

'M366172:200529'

Printed on 19 Jan 2024