## **PLAP Monoclonal Mouse Antibody (GM022)**



## **Product Description**

Reacts with a 70 kDa membrane-bound isozyme (Regan and Nagao type) of Placental Alkaline Phosphatase (PLAP) occurring in the placenta during the 3rd trimester of gestation. It is highly specific for PLAP and shows no cross-reaction with other isozymes of alkaline phosphatase. Anti-PLAP reacts with germ cell tumors and can discriminate between these and other neoplasms. Somatic neoplasms e.g. breast, gastrointestinal, prostatic, and urinary cancers may also immunoreact with antibodies to PLAP. Anti-PLAP positivity in conjunction with anti-keratin negativity favors seminoma over carcinoma. Germ cell tumors are usually anti-keratin positive, but they regularly fail to stain with anti-EMA, whereas most carcinomas stain with anti-EMA. Anti-PLAP has been useful in the diagnosis of gestational trophoblastic disease.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

**Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0874, Anti-PLAP (GM022)

## Product attributes

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Product attributes			
Antibody number	#0874		
Antibody reactivity (target)	PLAP		
Antibody type	Primary		
Host species	Mouse		
Clonality	Monoclonal		
Clone	GM022		
Isotype	IgG2b, kappa		
Molecular weight	70 kDa		
Synonyms	Alkaline phosphatase placental type, Alkaline phosphatase Regan Isozyme, ALP, Alp1, ALPP, Germ-Cell alkaline phosphatase, nagao Isozyme, PALP, Placental alkaline phosphatase 1, placental heat-stable alkaline phosphatase, PLAP-1, PLAP1		
Human gene symbol	ALPP		
Entrez gene ID	250		
SwissProt	P05187		
Unigene	284255		
Immunogen	Recombinant human PLAP protein		
Antibody target cellular	Plasma membrane		
Verified antibody applications	IHC (FFPE) (verified), WB (verified)		
Species reactivity	Human		
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mL, Immunohistology formalin-fixed 0.25-0.5 ug/mL, No special pretreatment is required for the immunohistochemical staining of formalin-fixed tissues, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user		
Positive control	HepG2 cells. Placenta or seminoma		
Shipping condition	Room temperature		
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C		
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended		
Regulatory status	For research use only (RUO)		
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.1 mg/mL in PBS/0.05% BSA/0.05% azide Purified, BSA-free: 1 mg/mL in PBS without azide		
Cell/tissue expression	Placenta		
Antibody research areas	Metabolism		

Ovarian cancer, Testicular cancer

Email: btinfo@biotium.com

Antibody # prefix BNC04	Conjugation CF®405S	Ex/Em (nm) 404/431	Laser line 405	Detection channel DAPI (microscopy), AF405	Dye Features CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified,	N/A	N/A	N/A	

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