

Thymidine Phosphorylase / PD-ECGF Monoclonal Mouse Antibody (P-GF.44C)

Product Description

This antibody recognizes a protein (amino acid 482) of 55 kDa (in vivo 110 kDa homodimer), identified as platelet-derived endothelial growth factor (PD-ECGF), same as thymidine phosphorylase (TP) or gliostatin. In the presence of inorganic orthophosphate, it catalyzes the reversible phospholytic cleavage of thymidine and deoxyuridine to their corresponding bases and 2-deoxyribose-1-phosphate. It is both chemotactic and mitogenic for endothelial cells and a non-heparin binding angiogenic factor present in platelets. Its enzymatic activity is crucial for angiogenic activity (metabolite is angiogenic). Higher levels of serum TP/PD-ECGF are observed in cancer patients. It is also involved in transformation of fluoropyrimidines, cytotoxic agents used in the treatment of a variety of malignancies, into active cytotoxic metabolites (e.g. 5 -deoxy-5-fluorouridine to 5-FU). High intra-cellular levels of TP/PD-ECGF are associated with increased chemosensitivity to such antimetabolites.

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 order@biotium.com to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 1244, Anti-PD-ECGF (P-GF.44C)

Product attributes

Antibody number	#1244
Antibody reactivity (target)	PD-ECGF, Thymidine Phosphorylase
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	P-GF.44C
Isotype	IgG1
Molecular weight	55 kDa
Synonyms	ECGF; ECGF1; Gliostatin; hPD-ECGF; MEDPS1; MNGIE; MTDPS1; PD-ECGF; PDECGF; Platelet-derived endothelial cell growth factor; TdRPase; Thymidine phosphorylase; TP; Tymp
Human gene symbol	TYMP
Entrez gene ID	1890
SwissProt	P19971
Unigene	180903
Immunogen	Recombinant full-length human Thymidine Phosphorylase (TP / PD-ECGF) protein
Verified antibody applications	IHC (FPPE) (verified), WB (verified)
Antibody target cellular localization	Nucleus & cytoplasm
Species reactivity	Human, Mouse, Rat
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunohistology (formalin) 1-2 ug/mL, Western blotting 0.5-1 ug/mL, Immunoprecipitation 0.5-1 ug/500ug protein lysate, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min, Optimal dilution for a specific application should be determined by user
Positive control	HUVEC cells, Breast, Bladder, Lung or Kaposi tumors
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: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Angiogenesis, Metabolism

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	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, BSA-free	N/A	N/A	N/A	

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