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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, kappa
Molecular weight of antigen	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 (FFPE) (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
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.

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
BNC74	CF®740	742/767	633-685	775/50	CF®740 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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