10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Thymidine Phosphorylase / PD-ECGF Antibody

Mouse Monoclonal Antibody
Catalog # AH13184

Product Information

Application	WB, IHC-P, IP
Primary Accession	P19971
Other Accession	180903
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1
Clone Names	SPM322
Calculated MW	49955

Additional Information

Gene ID	1890
Other Names	ECGF; ECGF1; Gliostatin; hPD-ECGF; MEDPS1; MNGIE; MTDPS1; PD-ECGF; PDECGF; Platelet-derived endothelial cell growth factor; TdRPase; Thymidine phosphorylase; TP; Tymp
Application Note	Western Blotting (0.5-1ug/ml); Immunoprecipitation (0.5-1 □g/500ug protein lysate);,Immunohistology (Formalin-fixed) (1-2ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Anti-Thymidine Phosphorylase / PD-ECGF Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

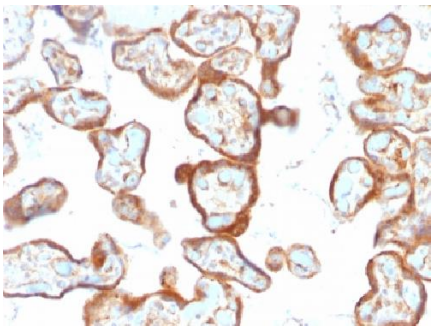
Name	TYMP (HGNC:3148)
Synonyms	ECGF1
Function	May have a role in maintaining the integrity of the blood vessels. Has growth promoting activity on endothelial cells, angiogenic activity in vivo and

chemotactic activity on endothelial cells in vitro.

Background

Recognizes a protein (amino acid 482) of 55kDa (in vivo 110kDa 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.

Images



Formalin-fixed, paraffin-embedded human Placenta stained with Thymidine Phosphorylase / PD-ECGF Monoclonal Antibody (SPM322).