

Rabbit Anti-Thymidine Phosphorylase/PD-ECGF Recombinant [TYMP/2890R]: RM0357, RM0357RTU7

Intended Use: For Research Use Only

Description: 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.

Specifications

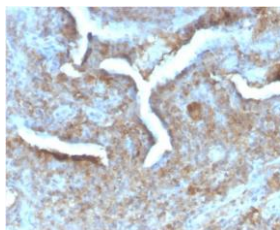
Clone:	TYMP/2890R
Source:	Rabbit
Isotype:	IgG
Reactivity:	Human
Immunogen:	Recombinant full-length human Thymidine Phosphorylase (TP / PD-ECGF) protein
Localization:	Cytoplasm, nucleus
Formulation:	Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN ₃)
Storage:	Store at 2°- 8°C
Applications:	IHC
Package:	

Description	Catalog No.	Size
Thymidine Phosphorylase/PD-ECGF Recombinant Concentrated	RM0357	1 ml
Thymidine Phosphorylase/PD-ECGF Recombinant Prediluted	RM0357RTU7	7 ml

IHC Procedure

Positive Control Tissue:	Breast, bladder, lung or kaposi tumors, HUVEC cells
Concentrated Dilution:	50-200
Pretreatment:	Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human prostate carcinoma stained with anti-Thymidine Phosphorylase using DAB

References:

1. Thymidine phosphorylase promotes metastasis and serves as a marker of poor prognosis in hepatocellular carcinoma. Zhang Q et al. Lab Invest. 2017.
2. Liver as a source for thymidine phosphorylase replacement in mitochondrial neurogastrointestinal encephalomyopathy. Boschetti E et al. PLoS One. 2014.
3. Thymidine phosphorylase expression in normal, hyperplastic and neoplastic prostates: correlation with tumour associated macrophages, infiltrating lymphocytes, and angiogenesis. Sivridis E et al. Br J Cancer. 2002.