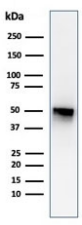
Thymidine Phosphorylase Antibody / PD-ECGF [clone P-GF.44C] (V3416)

Catalog No.	Formulation	Size
V3416-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3416-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3416SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

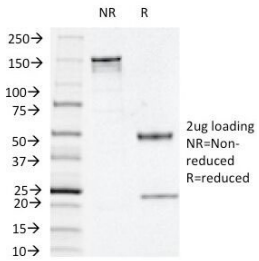
Citations (24)

Bulk quote request

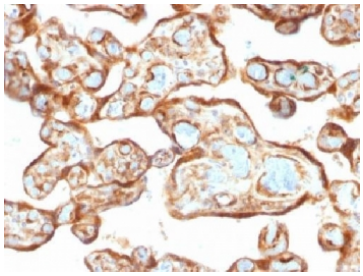
Species Reactivity	Human, Mouse, Rat
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	P-GF.44C
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
UniProt	P19971
Localization	Cytoplasmic, nuclear
Applications	Western Blot : 0.5-1ug/ml Immunoprecipitation : 0.5-1ug/500ug protein lysate Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Thymidine Phosphorylase antibody is available for research use only.



Western blot testing of human spleen lysate with Thymidine Phosphorylase antibody (clone P-GF.44C). Predicted molecular weight ~55 kDa.



SDS-PAGE Analysis of Purified, BSA-Free Thymidine Phosphorylase Antibody (clone P-GF.44C). Confirmation of Integrity and Purity of the Antibody.



IHC testing of FFPE human placenta with Thymidine Phosphorylase antibody (clone P-GF.44C). Required HIER: requires boil tissue sections in 10mM citrate buffer, pH 6, for 10-20 min followed by cooling at RT for 20 min.

Description

Recognizes a 485 amino acid protein (55 kDa monomer / 110 kDa homodimer), identified as platelet-derived endothelial growth factor (PD-ECGF), also called Thymidine Phosphorylase (TP, Tymp) 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.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the Thymidine Phosphorylase antibody to be titered up or down for optimal performance.

Immunogen

Human recombinant full length protein was used as the immunogen for this Thymidine Phosphorylase antibody.

Storage

Store the Thymidine Phosphorylase antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).