

TPK1 Polyclonal Antibody

Catalog number: 10942-1-AP

Size: 20 µg/150 µl

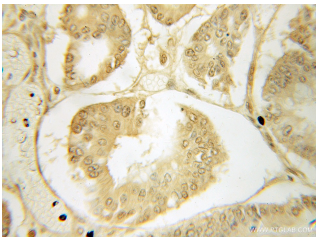
Source: Rabbit

Isotype: IgG

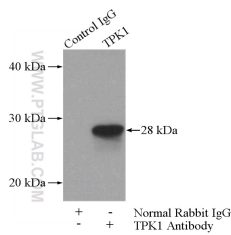
Synonyms:

TPK1; HTPK1, Placental protein 20, PP20, thiamine

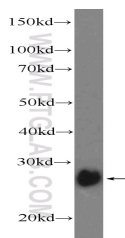
pyrophosphokinase 1, Thiamine pyrophosphokinase 1, TPK1



Immunohistochemical of paraffin-embedded human colon cancer using 10942-1-AP (TPK1 antibody) at dilution of 1:10 (under 10x lens)



IP Result of anti-TPK1 (IP:10942-1-AP, 4µg; Detection:10942-1-AP 1:500) with mouse kidney tissue lysate 4000µg.



mouse kidney tissue were subjected to SDS PAGE followed by western blot with 10942-1-AP (TPK1 Antibody) at dilution of 1:1000

Background

TPK1 (Thiamine pyrophosphokinase 1) is also named as PP20 (placental protein 20) and belongs to the thiamine pyrophosphokinase family. It is a cellular enzyme involved in the regulation of thiamine metabolism and catalyzes the conversion of thiamine, a form of vitamin B1, to thiamine pyrophosphate (TDP, or TPP). There is no difference in TPK1 expression in cultured fibroblasts from normal subjects or from patients with thiamine-responsive megaloblastic anemia (PMID:11342111). It can exist as a dimer (PMID:21552434). Defects in TPK1 are the cause of thiamine metabolism dysfunction syndrome type 5, episodic encephalopathy type (THMD5).

Applications

Tested applications:	ELISA, IHC, WB, IP
Cited applications:	WB
Species specificity:	Human, Mouse, Rat; other species not tested.
Cited species:	Human, mouse, rat
Calculated TPK1 MW:	28 kDa
Observed TPK1 MW:	28 kDa
Positive WB detected in	Mouse kidney tissue, HEK-293 cells, human small intestine tissue, L02 cells, mouse small intestine tissue, mouse testis tissue
Positive IP detected in	Mouse kidney tissue
Positive IHC detected in	Human colon cancer tissue, human kidney tissue
Recommended dilution:	WB: 1:500-1:5000 IP: 1:200-1:2000 IHC: 1:10-1:100

Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

Immunogen information

Immunogen:	Ag1404
GenBank accession number:	BC014552
Gene ID (NCBI):	27010
Full name:	Thiamine pyrophosphokinase 1

Product information

Purification method:	Antigen affinity purification
Storage:	PBS with 0.1% sodium azide and 50% glycerol pH 7.3. Store at -20°C.