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TKTL1 Rabbit pAb

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Catalog # AP58409

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P51854
Reactivity	Rat, Human, Mouse
Predicted	Pig, Dog, Rabbit, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	65333
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human TKTL1
Epitope Specificity	101-200/596
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Nucleus. Note=Predominantly cytoplasmic and to a lesser extent also nuclear.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The protein encoded by this gene is a transketolase that acts as a homodimer and catalyzes the conversion of sedoheptulose 7-phosphate and D-glyceraldehyde 3-phosphate to D-ribose 5-phosphate and D-xylulose 5-phosphate. This reaction links the pentose phosphate pathway with the glycolytic pathway. Variations in this gene may be the cause of Wernicke-Korsakoff syndrome. Three transcript variants encoding different isoforms have been found for this gene.

Additional Information

Gene ID	8277
Other Names	Transketolase-like protein 1, 2.2.1.1, Transketolase 2, TK 2, Transketolase-related protein, TKTL1, TKR, TKT2
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

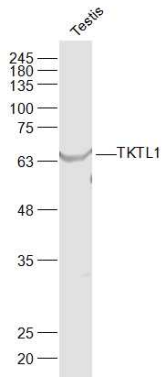
Protein Information

Name	TKTL1
Synonyms	TKR, TKT2
Function	Catalyzes the transfer of a two-carbon ketol group from a ketose donor to an aldose acceptor, via a covalent intermediate with the cofactor thiamine pyrophosphate (By similarity). Thus, catalyzes the reversible transfer of a two-carbon ketol group from sedoheptulose- 7-phosphate to glyceraldehyde-3-phosphate, producing xylulose-5- phosphate and ribose-5-phosphate (By similarity). The phosphate group of the substrate plays a role in stabilizing the substrate-thiamine intermediate while preventing the formation of the reactive enamine intermediate (By similarity). Can also use fructose-6-phosphate as a ketose donor (By similarity).
Cellular Location	Cytoplasm.
Tissue Location	Widely expressed (PubMed:8838793). Expressed in endothelial cells and in peripheral neurons (at protein level) (PubMed:15991799). [Isoform 4]: Expressed in fetal neocortex.

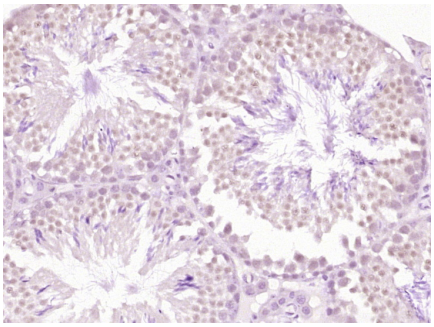
Background

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Images



Sample:
Testis (Mouse) Lysate at 40 ug
Primary: Anti-TKTL1 (AP58409) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 65 kD
Observed band size: 65 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse testis); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (TKTL1) Polyclonal Antibody, Unconjugated (AP58409) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.