SDHB (ANT0060R) Rabbit mAb

CatalogNo: ANT8296 Recombinant

Formulation: PBS,50%glycerol,0.05%Proclin 300,0.05%BSA
Quantity : 100 ug/vial

Host Species	Reactivity	Applications
• Rabbit • Human,Mouse,Rat,	• WB,IHC,IF,IP,ELISA	

MW	Isotype
• 31kD (Calculated) 31kD (Observed)	• IgG,Kappa

Recommended Dilution Ratios

IHC 1:200-1:1000
WB 1:2000-1:10000
IF 1:200-1:1000
ELISA 1:5000-1:20000
IP 1:50-1:200

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)

Basic Information

Clonality	Monoclonal
Clone Number	ANT0060R

Immunogen Information Specificity

Endogenous

Target Information

Gene name SDHB

Protein Name Succinate dehydrogenase [ubiquinone] iron-sulfur subunit mitochondrial

Organism	Gene ID	UniProt ID
Human	6390;	P21912;
Mouse	67680;	Q9CQA3;
Rat	298596;	P21913;

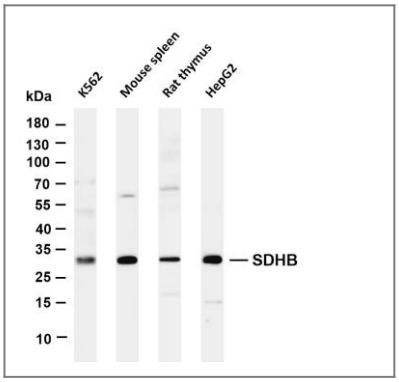
Cellular Localization Mitochondrion inner membrane

Tissue specificity Brain,Fibroblast,Liver,

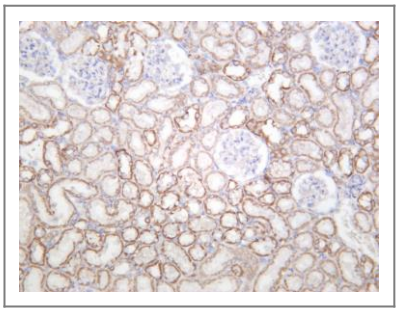
Function Catalytic activity:Succinate + ubiquinone = fumarate + ubiquinol.,cofactor:Binds 1 2Fe-2S cluster.,cofactor:Binds 1 3Fe-4S cluster.,cofactor:Binds 1 4Fe-4S cluster.,Disease:Defects in SDHB are a cause of Cowden-like syndrome [MIM:612359]. Cowden-like syndrome is a cancer predisposition syndrome associated with elevated risk for tumors of the breast, thyroid, kidney and uterus.,Disease:Defects in SDHB are a cause of paraganglioma and gastric stromal sarcoma [MIM:606864]; also called Carney-Stratakis syndrome. Gastrointestinal stromal tumors may be sporadic or inherited in an autosomal dominant manner, alone or as a component of a syndrome associated with other tumors, such as in the context of neurofibromatosis type 1 (NF1). Patients have both gastrointestinal stromal tumors and paragangliomas. Susceptibility to the tumors was inherited in an apparently autosomal dominant manner, with incomplete penetrance.,Disease:Defects in SDHB are a cause of pheochromocytoma [MIM:171300]. The pheochromocytomas are catecholamineproducing, chromaffin tumors that arise in the adrenal medulla in 90% of cases. In the remaining 10% of cases, they develop in extra-adrenal sympathetic ganglia and may be referred to as "paraganglioma." Pheochromocytoma usually presents with hypertension. Approximately 10% of pheochromocytoma is hereditary. Although pheochromocytoma susceptibility may be associated with germline mutations in the tumor-suppressor genes VHL and NF1 and in the proto-oncogene RET, the genetic basis for most cases of nonsyndromic familial pheochromocytoma is unknown.,Disease:Defects in SDHB are the cause of hereditary paragangliomas type 4 (PLG4) [MIM:115310]; also known as familial nonchromaffin paragangliomas type 4. Paragangliomas refer to rare and mostly benign tumors that arise from any component of the neuroendocrine system. PLG4 is characterized by the development of mostly benign, highly vascular, slow growing tumors in the head and neck. In the head and neck region, the carotid body is the largest of all paraganglia and is also the most common site of the tumors.,Function:Iron-sulfur protein (IP) subunit of succinate dehydrogenase (SDH) that is involved in complex II of the mitochondrial electron transport chain and is responsible for transferring electrons from succinate to ubiquinone (coenzyme Q).,pathway:Carbohydrate metabolism; tricarboxylic acid cycle.,similarity:Belongs to the succinate dehydrogenase/fumarate reductase iron-sulfur protein family.,similarity:Contains
1 2Fe-2S ferredoxin-type domain.,similarity:Contains 1 4Fe-4S ferredoxin-type domain.,subunit:Component of complex II composed of four subunits: the flavoprotein (FP) sdha, iron-sulfur protein (IP) sdhb, and a cytochrome b560 composed of sdhc and sdhd.,

Validation

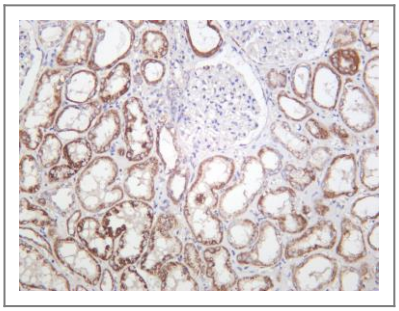
Data



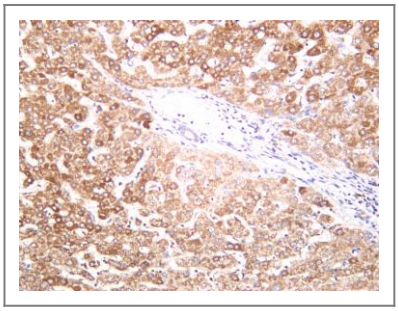
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-SDHB (ANT0060R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: K562 Lane 2: Mouse spleen Lane 3: Rat thymus Lane 4:
HepG2 Predicted band size: 31kDa Observed band size: 31kDa



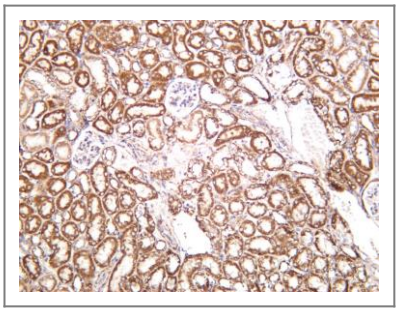
Rat kidney was stained with anti-SDHB (ANT0060R) rabbit antibody



Human kidney was stained with anti-SDHB (ANT0060R) rabbit antibody



Human liver was stained with anti-SDHB (ANT0060R) rabbit antibody



Mouse kidney was stained with anti-SDHB (ANT0060R) rabbit antibody