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Anti-HKDC1 Picoband Antibody

Catalog # ABO12066

Product Information

Application	WB
Primary Accession	Q2TB90
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Putative hexokinase HKDC1(HKDC1) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	80201
Other Names	Putative hexokinase HKDC1, 2.7.1.1, Hexokinase domain-containing protein 1, HKDC1
Calculated MW	102545
Application Details	Western blot, 0.1-0.5 □g/ml, Human
Source	Eukaryota
Protein Name	Putative hexokinase HKDC1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human HKDC1(102-136aa KRHVQMESQFYPTPNEIIRGNGTELFEYVADCLAD), different from the related mouse sequence by four amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the hexokinase family.

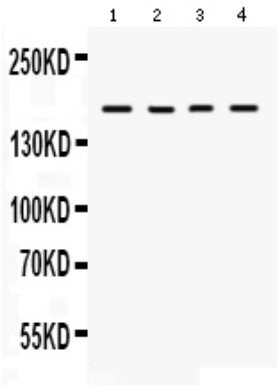
Protein Information

Name	HKDC1 (HGNC:23302)
Function	Catalyzes the phosphorylation of hexose to hexose 6- phosphate, although at very low level compared to other hexokinases (PubMed:30517626). Has low glucose phosphorylating activity compared to other hexokinases (PubMed:30517626). Involved in glucose homeostasis and hepatic lipid accumulation. Required to maintain whole-body glucose homeostasis during pregnancy; however additional evidence is required to confirm this role (By similarity).
Cellular Location	Cytoplasm. Mitochondrion membrane; Peripheral membrane protein. Photoreceptor inner segment {ECO:0000250|UniProtKB:Q91W97}. Note=The mitochondrial-binding peptide (MBP) region promotes association with the mitochondrion
Tissue Location	Widely expressed (PubMed:27459389, PubMed:29401404). Highly expressed in the brush border, surface epithelium and the myenteric plexus of the small and large intestines; the acinar centrocytes and interlobular ducts of the pancreas; and the alveolar macrophages in the lungs (at protein level) (PubMed:29401404) Present at moderate level in the thyroid follicular epithelium (at protein level) (PubMed:29401404).

Background

The epidermal growth factor receptor (HKDC1; ErbB-1; HER1 in humans) is the cell-surface receptor for members of the epidermal growth factor family (EGF-family) of extracellular protein ligands. It is a member of the ErbB family of receptors, a subfamily of four closely related receptor tyrosine kinases: HKDC1 (ErbB-1), HER2/c-neu (ErbB-2), Her 3 (ErbB-3) and Her 4 (ErbB-4). HKDC1 exists on the cell surface and is activated by binding of its specific ligands, including epidermal growth factor and transforming growth factor □± (TGF □±). HKDC1 and its ligands are cell signaling molecules involved in diverse cellular functions, including cell proliferation, differentiation, motility, and survival, and in tissue development. Mutations that lead to HKDC1 overexpression (known as upregulation) or overactivity have been associated with a number of cancers, including lung cancer and glioblastoma multiforme. In this latter case a more or less specific mutation of HKDC1, called HKDC1vIII is often observed.

Images



Anti-HKDC1 Picoband antibody, ABO12066, Western blottingAll lanes: Anti HKDC1 (ABO12066) at 0.5ug/mlLane 1: 293T Whole Cell Lysate at 40ugLane 2: SW620 Whole Cell Lysate at 40ugLane 3: COLO320 Whole Cell Lysate at 40ugLane 4: HELA Whole Cell Lysate at 40ugPredicted bind size: 103KDObserved bind size: 170KD

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