

Pax-6 Monoclonal Antibody

Catalog No: YM0508

Reactivity: Human

Applications: WB;FCM;ELISA

Target: Pax-6

Fields: >>Signaling pathways regulating pluripotency of stem cells;>>Maturity onset

diabetes of the young

Gene Name: PAX6

Protein Name: Paired box protein Pax-6

P26367

P63015

Human Gene Id: 5080

Human Swiss Prot

No:

Mouse Swiss Prot

No:

Immunogen: Purified recombinant fragment of human Pax-6 expressed in E. Coli.

Specificity: Pax-6 Monoclonal Antibody detects endogenous levels of Pax-6 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Monoclonal, Mouse

Dilution: WB 1:500 - 1:2000. Flow cytometry: 1:200 - 1:400. ELISA: 1:10000. Not yet

tested in other applications.

Purification : Affinity purification

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

Molecularweight: 47kD

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Cell Pathway: Maturity onset diabetes of the young;

P References: 1.Invest Ophthalmol Vis Sci. 2009 Jun;50(6):2581-90.

2.J Biol Chem. 2009 Oct 2;284(40):27524-32. 3.J Biol Chem. 2010 Jan 22;285(4):2527-36.

Background: This gene encodes a homeobox and paired domain-containing protein that binds

DNA and functions as a regulator of transcription. Activity of this protein is key in the development of neural tissues, particularly the eye. This gene is regulated by multiple enhancers located up to hundreds of kilobases distant from this locus. Mutations in this gene or in the enhancer regions can cause ocular disorders such as aniridia and Peter's anomaly. Use of alternate promoters and alternative splicing result in multiple transcript variants encoding different isoforms. [provided

by RefSeq, Jul 2015],

Function: developmental stage:Expressed in the developing eye and

brain.,disease:Defects in PAX6 are a cause of autosomal dominant keratitis [MIM:148190]. It is an eye disorder characterized by corneal opacification and vascularization, and by foveal hypoplasia.,disease:Defects in PAX6 are a cause of bilateral optic nerve hypoplasia [MIM:165550]; also known as bilateral optic nerve aplasia. Inheritance is autosomal dominant.,disease:Defects in PAX6 are a cause of coloboma of optic nerve [MIM:120430].,disease:Defects in PAX6 are a cause of ectopia pupillae [MIM:129750]. It is a congenital eye malformation in which the pupils are displaced from their normal central position.,disease:Defects in PAX6 are a cause of foveal hypoplasia [MIM:136520]. Foveal hypoplasia can be isolated or associated with presenile cataract. Inheritance is autosomal

dominant., disease: Defects in PAX6 are a cause of Gillespie

Subcellular Location:

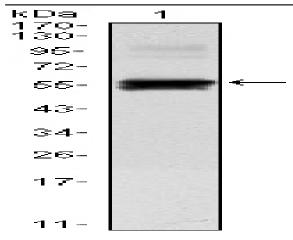
Nucleus .; [Isoform 1]: Nucleus .; [Isoform 5a]: Nucleus .

Expression: [Isoform 1]: Expressed in lymphoblasts.; [Isoform 5a]: Weakly expressed in

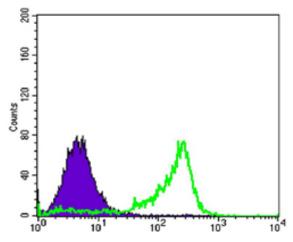
lymphoblasts.

Products Images

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Western Blot analysis using Pax-6 Monoclonal Antibody against recombinant Pax-6 protein (1).



Flow cytometric analysis of 3T3-L1 cells using Pax-6 Monoclonal Antibody (green) and negative control (purple).