10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Goat Anti-PAX6 (internal) Antibody

Peptide-affinity purified goat antibody

Catalog # AF1793a

Specification

Goat Anti-PAX6 (internal) Antibody - Product Information

Application	**WB, FC**
Primary Accession	P26367
Other Accession	NP_001595, 5080, 18508 (mouse), 25509 (rat)
Reactivity	**Mouse**
Predicted	**Human, Rat**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**46683**

Goat Anti-PAX6 (internal) Antibody - Additional Information

Gene ID 5080

Other Names
Paired box protein Pax-6, Aniridia type II protein, Oculorhombin, PAX6, AN2

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-PAX6 (internal) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-PAX6 (internal) Antibody - Protein Information

Name PAX6

Synonyms AN2

Function
Transcription factor with important functions in the development of the eye, nose, central nervous system and pancreas. Required for the differentiation of pancreatic islet alpha cells (By similarity). Competes with PAX4 in binding to a common element in the glucagon, insulin and somatostatin promoters. Regulates specification of the ventral neuron subtypes by establishing the correct

progenitor domains (By similarity). Acts as a transcriptional repressor of NFATC1- mediated gene expression (By similarity).

Cellular Location
Nucleus {ECO:0000250|UniProtKB:P63015}. [Isoform 5a]: Nucleus {ECO:0000250|UniProtKB:P63016}

Tissue Location
[Isoform 1]: Expressed in lymphoblasts.

Goat Anti-PAX6 (internal) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

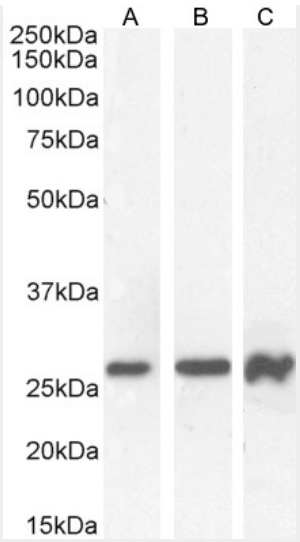
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-PAX6 (internal) Antibody - Images

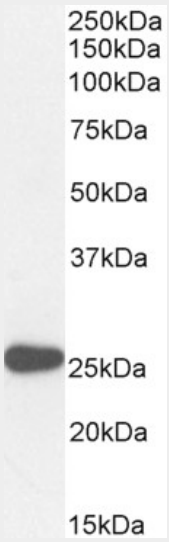


AF1793a (0.5 µg/ml) staining of Mouse Eye lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

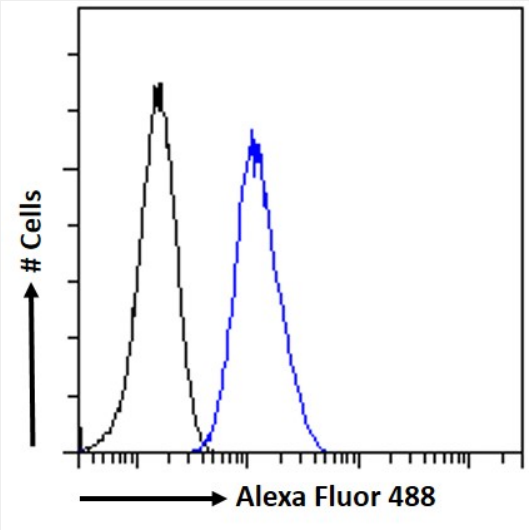
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



EB07772 (0.3µg/ml) staining of U251 (A), (0.03ug/ml) nuclear K562 (B) and (1ug/ml) nuclear HeLa (C) cell lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



.EB07772 (0.5µg/ml) staining of RAW264.7 cell lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



EB07772 Flow cytometric analysis of paraformaldehyde fixed U251 cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) followed by Alexa Fluor 488 secondary antibody.

Goat Anti-PAX6 (internal) Antibody - Background

This gene encodes paired box gene 6, one of many human homologs of the Drosophila melanogaster gene prd. In addition to the hallmark feature of this gene family, a conserved paired box domain, the encoded protein also contains a homeo box domain. Both domains are known to bind DNA, and function as regulators of gene transcription. This gene is expressed in the developing nervous system, and in developing eyes. Mutations in this gene are known to cause ocular disorders such as aniridia and Peter's anomaly. Alternatively spliced transcript variants encoding either the same or different isoform have been found for this gene.

Goat Anti-PAX6 (internal) Antibody - References

Molecular genetic and immunophenotypical analysis of Pax6 transcription factor and neural differentiation markers in human fetal neocortex and retina in vivo and in vitro. Verdiev BI, et al. Bull Exp Biol Med, 2009 Oct. PMID 20396773.
Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.
Candidate gene study to investigate the genetic determinants of normal variation in central corneal thickness. Dimasi DP, et al. Mol Vis, 2010 Mar 31. PMID 20360993.
Isoform- and dose-sensitive feedback interactions between paired box 6 gene and delta-catenin in cell differentiation and death. Zhang J, et al. Exp Cell Res, 2010 Apr 1. PMID 20074565.
Malformations of the brain in two fetuses with a compound heterozygosity for two PAX6 mutations. Schmidt-Sidor B, et al. Folia Neuropathol, 2009. PMID 20054790.