**Pax-6 (AD2.38): sc-32766**

**BACKGROUND**

Pax genes contain paired domains with strong homology to genes in *Drosophila* which are involved in programming early development. Lesions in the Pax-6 gene accounts for most cases of aniridia, a congenital malformation of the eye, chiefly characterized by iris hypoplasia, which can cause blindness. Pax-6 is involved in other anterior segment malformations besides aniridia, such as Peters’ anomaly, a major error in the embryonic development of the eye with corneal clouding with variable iridolenticulocorneal adhesions. The Pax-6 gene encodes a transcriptional regulator that recognizes target genes through its paired-type DNA-binding domain. The paired domain is composed of two distinct DNA-binding subdomains, the amino-terminal subdomain and the carboxy-terminal subdomain, which bind respective consensus DNA sequences. The human Pax-6 gene produces two alternatively spliced isoforms that have the distinct structure of the paired domain.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: PAX6 (human) mapping to 11p13; Pax6 (mouse) mapping to 2 E3.

**SOURCE**

Pax-6 (AD2.38) is a mouse monoclonal antibody raised against amino acids 1-206 mapping at the N-terminus of Pax-6 of human origin.

**PRODUCT**

Each vial contains 200 μg IgG1 lambda light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-32766 X, 200 μg/0.1 ml.

Pax-6 (AD2.38) is available conjugated to agarose (sc-32766 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-32766 HRP), 200 μg/ml, for WB, HRP and ELISA; to either phycoerythrin (sc-32766 PE), fluorescein (sc-32766 FITC), Alexa Fluor® 488 (sc-32766 AF488), Alexa Fluor® 546 (sc-32766 AF546), Alexa Fluor® 594 (sc-32766 AF594) or Alexa Fluor® 647 (sc-32766 AF647), 200 μg/ml, for WB (RGB), IF, HRP and FCIM; and to either Alexa Fluor® 680 (sc-32766 AF680) or Alexa Fluor® 790 (sc-32766 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCIM.

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**STORAGE**

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

Pax-6 (AD2.38) is recommended for detection of Pax-6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).


Pax-6 (AD2.38) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Pax-6: 47 kDa.

Positive Controls: Pax-6 (m): 293T Lysate: sc-127299, Pax-6 (h3): 293T Lysate: sc-176117 or Y79 nuclear extract: sc-2126.

**DATA**

![Western blot analysis of Pax-6 expression in non-transfected: sc-176117 (A) and mouse Pax-6 transfected: sc-127299 (B) 293T whole cell lysates.](image1)

![Western blot analysis of Pax-6 expression in non-transfected: sc-176117 (A) and human Pax-6 transfected: sc-176117 (B) 293T whole cell lysates.](image2)

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.