

Pax 6

Cat.No. 153 011; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg purified IgG, lyophilized. For reconstitution add 100 µl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 (AP staining) IP: not tested yet ICC: yes IHC: yes IHC-P/FFPE: 1 : 200 up to 1 : 500 (see remarks)
Clone	AD2.38
Subtype	IgG1 (λ 1 light chain)
Immunogen	Recombinant protein corresponding to AA 1 to 422 from mouse Pax6 (UniProt Id: P63015)
Epitop	Epitop: AA 4 to 130 from mouse Pax6 (UniProt Id: P63015)
Reactivity	Reacts with: human (P26367), rat (P63016), mouse (P63015), chicken. Other species not tested yet.
Specificity	Specific for Pax 6. (K.O. verified)
Remarks	Nuclear extracts from tissues should be used for Western blot experiments to increase the concentration of Pax 6. IHC-P: Antigen retrieval at pH 9.0 (Tris-EDTA) for 30min at 97°C

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Pax 6 (Sey) proteins regulate transcription and are composed of two DNA binding motives, an N-terminal paired domain (PD) and a C-terminal homeodomain (HD). Mutations or deletions in the Pax 6 gene cause severe defects in the development of the eye and the central nervous system (CNS). The Pax 6 mRNA is alternatively spliced at position 47 and is translated into two proteins of 46 and 48 kDa. The amino acid sequence and basic regulatory mechanisms of Pax 6 are conserved from invertebrates to mammals.

Selected References SYSY Antibodies

Lymphoblast-derived integration-free iPSC lines from a female and male Alzheimer's disease patient expressing different copy numbers of a coding CNV in the Alzheimer risk gene CR1.

Schröter F, Slegers K, Van Cauwenbergh C, Bohndorf M, Wruck W, Van Broeckhoven C, Adjaye J
Stem cell research (2016) 17(3): 560-563. **ICC**

Compartment-specific transcription factors orchestrate angiogenesis gradients in the embryonic brain.
Vasudevan A, Long JE, Crandall JE, Rubenstein JL, Bhide PG
Nature neuroscience (2008) 11(4): 429-39. **IHC**

Lymphoblast-derived integration-free ISRM-CON9 iPSC cell line from a 75year old female.
Martins S, Bohndorf M, Schröter F, Assar F, Wruck W, Slegers K, Van Broeckhoven C, Adjaye J
Stem cell research (2018) 26: 76-79. **IHC; tested species: human**

Lymphoblast-derived integration-free iPSC cell line from a female 67-year-old Alzheimer's disease patient with TREM2 (R47H) missense mutation.

Schröter F, Slegers K, Cuyvers E, Bohndorf M, Wruck W, Van Broeckhoven C, Adjaye J
Stem cell research (2016) 17(3): 553-555. **ICC**

Role of Pax6 in development of the cerebellar system.
Engelkamp D, Rashbass P, Seawright A, van Heyningen V
Development (Cambridge, England) (1999) 126(16): 3585-96.

Selected General References

Pax 6: mastering eye morphogenesis and eye evolution.
Gehring WJ, Ikeo K
Trends in genetics : TIG (1999) 15(9): 371-7.

Pax-6 expression in posthatch chick retina during and recovery from form-deprivation myopia.
Bhat SP, Rayner SA, Chau SC, Ariyasu RG
Developmental neuroscience (2004) 26(5-6): 328-35.

PAX-6 in development and evolution.
Callaerts P, Halder G, Gehring WJ
Annual review of neuroscience (1997) 20: 483-532.

Further studies on cortical tangential migration in wild type and Pax-6 mutant mice.
Jiménez D, López-Mascaraque L, de Carlos JA, Valverde F
Journal of neurocytology () 31(8-9): 719-28.