

Supplemental Table 1. PAX8 in immunohistochemical profiling of normal anterior segment structures and pathologic processes.

Diagnosis	Specimen type	Age, Sex	Tissues with positive immunohistochemical staining						
			PAX8	Vimentin	SMA	S100	AE1/AE3	CK5/6	CK7
Control, autopsy	Eyeball	1 mo, M	Kepi, LE, ELB, CBE, IPE, IM	Kendo, KS, LE, ELB, CBE, CBS, CBM, IPE, IS, IM	CBM, IM	LE, IPE, CBE, ISM, CBSM	Kepi, CE	Kepi, CE	CE, CBE, IPE
Control, uveal melanoma	Lens	62 y, F	LE	LE		LE			
Control, retinoblastoma	Eyeball	2 y, M	Kepi, LE, ELB, CBE, IPE, IM	Not performed	Not performed	Not performed	Not performed	Not performed	Not performed
Control, retinoblastoma	Eyeball	2 y, M	Kepi, LE, ELB, CBE, IPE, IM	Not performed	Not performed	Not performed	Not performed	Not performed	Not performed
Control, retinoblastoma	Eyeball	1 y, M	Kepi, LE, ELB, CBE, IPE, IM	Not performed	Not performed	Not performed	Not performed	Not performed	Not performed
Control, retinoblastoma	Eyeball	22 y, M	Kepi, LE, ELB, CBE, IPE, IM	Not performed	Not performed	Not performed	Not performed	Not performed	Not performed
Control, optic disc medulloepithelioma*	Eyeball	25 y, M	Kepi, LE, ELB, CBE, IPE, IM	Not performed	Not performed	Not performed	Not performed	Not performed	Not performed
Control, metastatic renal cell carcinoma	Eyeball	60 y, F	Kepi, LE, ELB, CBE, IPE, IM	Not performed	Not performed	Not performed	Not performed	Not performed	Not performed
Control, uveal melanoma*	Eyeball	56 y, M	Kepi, LE, ELB, CBE, IPE, IM	Not performed	Not performed	Not performed	Not performed	Not performed	Not performed
Control, maxillofacial tumor	Eyeball	60 y, F	Kepi, LE, ELB, CBE, IPE, IM	Not performed	Not performed	Not performed	Not performed	Not performed	Not performed
Phakomatous choristoma	Eyelid	2 mo, M	LE, BC	LE, BC, FBLC	FBLC	LE, BC			

Diagnosis	Specimen type	Age, Sex	Tissues with positive immunohistochemical staining						
			PAX8	Vimentin	SMA	S100	AE1/AE3	CK5/6	CK7
Peters anomaly, adherent leukoma, sclerocornea	Cornea	1 y, F	Kepi, LE, BC	KS, LE	KS	LE, BC	Kepi, CE	Kepi, CE	CE
Cataract (ASC, PSC), blind eye	Eyeball	43 y, M	Kepi, LE, ELB, BC, CBE, IPE, IM	Kendo, KS, LE, ELB, ASC, BC, CBE, CBS, CBM, IPE, IS, IM	ASC, CBM, IM	LE, BC, IPE, CBE, ISM, CBSM	Kepi, CE	Kepi, CE	CE
Cataract (ASC, PSC), retinoblastoma	Eyeball	3 y, F	Kepi, LE, ELB, BC, CBE, IPE, IM	Kendo, KS, LE, ELB, ASC, BC, CBE, CBS, CBM, IPE, IS, IM	ASC, CBM, IM	LE, BC, IPE, CBE, ISM, CBSM	Kepi, CE	Kepi, CE	CE, CBE, IPE
Congenital anterior polar pyramidal cataract	Anterior lens capsule	10 mo, F	LE, FBLC	LE, FBLC	FBLC	LE, FBLC (focal)			
Cataract (Soemmerring ring), blind eye (cornea not in the sections)	Eyeball	66 y, F	LE, ELB, BC, CBE	Kendo, KS, LE, ELB, CBE, CBS, CBM, IPE, IS, IM	CBM, IM				CE
Cataract (Soemmerring ring) with capsular fibrosis, adenocarcinoma of RPE*	Eyeball	67 y, F	Kepi, LE, ELB, CBE, IPE, IM, capsular fibrosis (rare cells)	Kendo, KS, LE, ELB, CBE, CBS, CBM, IPE, IS, IM	Not performed	Not performed	Not performed	Not performed	CE, CBE, IPE
Cataract (capsular fibrosis s/p cataract extraction), choroidal melanoma (cornea not in sections)	Eyeball	62, M	LE, ELB, CBE	LE, ELB, CBE, CBS, CBM, IPE, IS, IM	Capsular fibrosis, CBM, IM	LE, IPE, CBE, ISM, CBSM			CBE, IPE
Retrocorneal fibrous membrane (Kendo/fibrosis, KS/fibrosis), failed PKP	Posterior cornea, Membrane	69 y, M		Kendo/fibrosis, KS/fibrosis	Kendo/fibrosis, KS/fibrosis				Kendo/fibrosis

Diagnosis	Specimen type	Age, Sex	Tissues with positive immunohistochemical staining						
			PAX8	Vimentin	SMA	S100	AE1/AE3	CK5/6	CK7
Retrocorneal membrane (Kendo/fibrosis, LE/fibrosis), failed KPro	KPro membrane	78 y, F	LE	Kendo/fibrosis, LE/fibrosis	Kendo/fibrosis, LE/fibrosis				Kendo/fibrosis, LE/fibrosis
Retrocorneal membrane (Kendo/fibrosis, LE/fibrosis, Kepi down), failed PKP	Cornea	47 y, F	Kepi, Kepi down	KS, Kendo/fibrosis, LE/fibrosis	Kendo/fibrosis, LE/fibrosis		Kepi, Kepi down	Kepi, Kepi down	
Retrocorneal membrane (Kepi down, Kendo/fibrosis), perforated corneal ulcer	Retrocorneal membrane	64 y, M	Kepi down	Kendo/fibrosis	Kendo/fibrosis		Kepi down	Kepi down	Kepi down (focal), Kendo/fibrosis (focal)
Retrocorneal membrane (Kendo/fibrosis, CE down), aphakia, trauma	Eyeball	50 y, M	Kepi	KS, Kendo/fibrosis, CBE, CBS, CBM, IPE, IS, IM	Kendo/fibrosis, CBM, IM	IPE, CBE, ISM, CBSM	Kepi, CE, CE down	Kepi, CE, CE down	CE, CE down, CBE, IPE
Retrocorneal membrane (CE down), failed KPro, aphakia	Eyeball	57 y, M	Kepi, CE, CE down	KS, CBE, CBS, CBM	KS	CBE	Kepi, CE	Kepi, CE, CE down	CE, CE down, CBE

*Cases included in prior study (Reference 12) Mudhar HS, Milman T, Eagle RC Jr, et al. Usefulness of PAX8 immunohistochemistry in adult intraocular tumor diagnosis. *Ophthalmology*. 2020:S0161-6420(20)30958-1.

mo = month, y = year, M = male, F = female, Kepi = corneal epithelium, KS = corneal stroma, Kendo = corneal endothelium, CE = conjunctival epithelium, LE = lens epithelium, ELB = equatorial lens bow, CBE = ciliary body epithelium, CBS = ciliary body stroma, CBM = ciliary body muscle, CBSM = ciliary body stromal melanocytes, RPE = retinal pigment epithelium, IPE = iris pigment epithelium, IS = iris stroma, IM = iris muscle, ISM = iris stromal melanocytes, BC = bladder cells, FBLC = fibroblast-like cells, ASC = anterior subcapsular cataract, PSC = posterior subcapsular cataract, Kendo/fibrosis = corneal endothelium-derived fibrous membrane, KS/fibrosis = corneal stromal-derived fibrous membrane, LE/fibrosis = lens epithelial-derived fibrous membrane, PKP = penetrating keratoplasty, KPro = keratoprosthesis, Kepi down = corneal epithelial downgrowth, CE down = conjunctival epithelial downgrowth