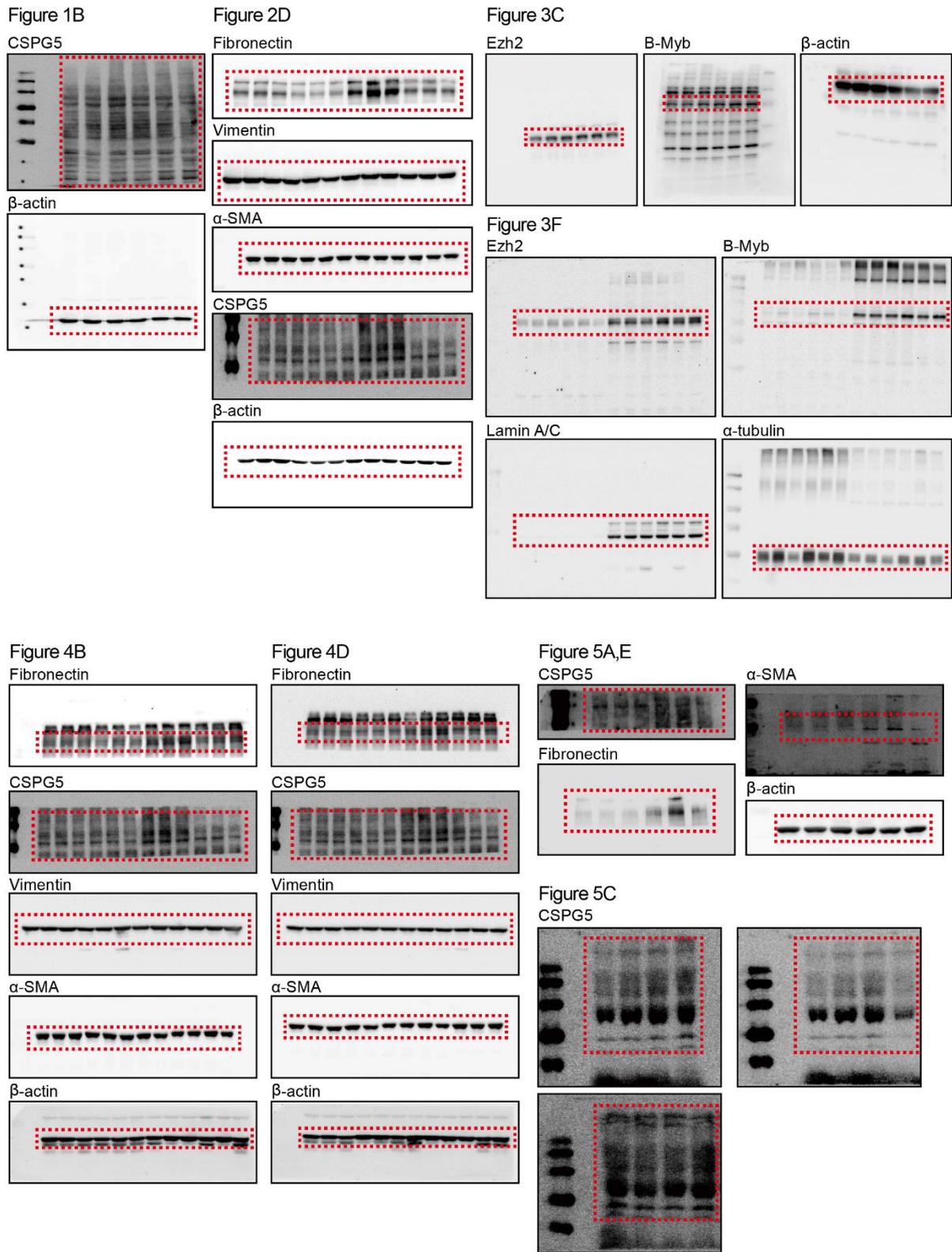


**Figure S1.** Effect of Dexa on viability of HLE-B3 cells. HLE-B3 cells were cultured in medium with various concentration of Dexa (0.1, 0.5 mg/ml) for 48 h. (A) The effect of Dexa on the activity of mitochondrial dehydrogenases in HLE-B3 cells was measured by the CCK-8 assay (n=8). The viability of control cells was set to 100%. Viability was represented as a percentage of control cells.  $p < 0.05$  was the significance threshold. (B) The effect of Dexa on the cell morphology was detected by F-actin staining (Green). DAPI was used as nuclear marker (Blue). Scale bar, 25  $\mu\text{m}$ . Ratio of protein expression determined using ImageJ software (n=3). Data are represented as means  $\pm$  S.E.M



**Figure S2.** Original full western blot image of the manuscript

**Table S1. Primary sequences used for mRNA expression analysis**

	<b>Gene</b>	<b>Primer</b>	<b>Sequences (5'-3')</b>
1	<i>Cspg5</i>	Forward	AAG CTG CGT AGG ACC AAC AA
		Reverse	AGC ACT AGG ATC ATC ATT TGG GT
2	<i>Ezh2</i>	Forward	TGG TGC TGA AGC CTC AAT GT
		Reverse	GTA TCC ACA TCC TCA GCG GG
3	<i>Mybl2</i>	Forward	CAT GAG GAG AAC CGC ACT GA
		Reverse	TCC ACT GCT TTG TGC CAT ACT

**Table S2. Clinical Characteristics of Patients with Steroid Induced Cataract**

Patient No.	Sex	Age	BCVA (Log-MAR)	IOP (mmHg)	LOCS III Grade				Reason for Steroid Use
					NO	NC	C	P	
1	Male	59	1.3	15	2	2	1	2	VKH syndrome
2	Female	82	1	15	4	4	3	2	Nodular scleritis
3	Male	45	1.3	19	3	3	1	2	Chronic uveitis
4R	Male	56	0.1	13	3	3	2	2	Kidney transplantation
4L	Male	56	0.2	16	3	3	1	2	Kidney transplantation
5	Male	70	0.8	10	4	4	1	2	Adrenal insufficiency
6	Female	60	1.3	13	4	4	2	4	Eosinophilic granulomatosis with polyangiitis
7R	Male	60	0.2	11	3	3	1	3	Chronic dermatitis
7L	Male	60	0.3	12	3	3	1	2	Chronic dermatitis
8	Female	70	0.3	19	3	3	3	3	Chronic uveitis
9	Male	45	0.2	14	3	3	2	2	Kidney transplantation
10	Female	56	1.3	16	3	3	2	2	Chronic uveitis

BCVA=best corrected visual acuity; IOP=intraocular pressure; L=Left; R=Right

**Table S3. Clinical Characteristics of patients with Age-Related Cataract**

Patient No.	Sex	Age	BCVA (LogMAR)	IOP (mmHg)	LOCS III Grade			
					NO	NC	C	P
1	Female	71	0.5	12	3	3	4	0
2	Female	72	0.2	9	4	4	3	0
3R	Female	55	0.5	14	3	3	1	0
3L	Female	55	0.7	15	3	3	1	0
4	Male	65	0.4	8	4	4	2	1
5	Male	75	0.7	14	3	3	3	1
6R	Male	79	0.8	14	5	5	3	1
6L	Male	79	2	10	5	5	3	1
7R	Female	73	0.5	11	3	3	1	1
7L	Female	73	1	15	4	4	2	1
8	Female	56	0.7	20	4	4	2	0
9	Female	78	0.7	14	6	6	2	1
10	Female	73	0.5	16	3	3	3	1
11R	Female	73	0.7	18	3	3	3	0
11L	Female	73	0.7	16	3	3	3	0
12	Male	72	0.8	14	3	3	1	0
13R	Male	68	0.5	11	5	5	3	0
13L	Male	68	1.6	13	5	5	3	0
14	Male	74	0.5	14	4	4	3	1
15R	Male	54	0.7	14	4	4	4	1
15L	Male	54	0.7	14	4	4	4	0
16	Male	62	0.5	14	3	3	3	1
17	Female	65	2	17	4	4	1	1
18	Female	76	0.7	12	4	4	3	1
19	Female	70	0.3	13	3	3	2	0
20	Male	69	0.4	17	4	4	4	1
21R	Male	77	0.2	12	5	5	3	0
21L	Male	77	0.1	11	5	5	2	0
22	Male	39	1	16	3	3	3	0
23	Male	75	0.4	19	4	4	2	0
24	Female	64	0.2	13	3	3	5	0
25R	Male	60	0.7	11	3	3	1	0
25L	Male	60	0.7	12	3	3	1	0
26	Male	72	0.1	19	3	3	3	1
27	Male	74	0.8	16	4	4	1	0
28R	Male	68	0.5	12	4	4	2	0
28L	Male	68	0.7	14	4	4	2	1
29	Female	85	0.7	17	4	4	4	0
30	Female	76	0.7	18	4	4	2	1
31	Female	62	0.3	15	3	3	3	0

32R	Female	63	0.5	10	3	3	4	0
32L	Female	63	0.8	13	3	3	2	1
33	Female	69	2	11	4	4	5	1
34	Female	53	1.6	15	5	5	3	1
35	Female	55	0.1	12	3	3	4	1
36	Female	67	0.7	13	3	3	3	1
37	Male	65	0.7	18	4	3	1	0
38	Female	71	0.7	16	4	4	2	0
39R	Male	79	0.5	18	4	4	3	0
39L	Male	79	0.8	15	4	4	3	0

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BCVA=best corrected visual acuity; IOP=intraocular pressure; L=Left; R=Right

## **Supplementary information**

Figure S1. Effect of dexamethasone on viability of HLE-B3 cells

Figure S2. Original full western blot images of the manuscript

Table S1. Primary sequences used for mRNA expression analysis

Table S2. Clinical characteristics of patients with steroid-induced cataract

Table S3. Clinical characteristics of patients with age-related cataract