**Supplementary Table 2. The reported nonsense mutations in crystalline genes**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Gene** | **Exon/ Intron** | **DNA Change** | **Coding Change** | **Inheritance** | **Origin** | **Cataract Phenotype** | **Reference** |
| *CRYBB1* | Ex6 | c.658G>T | p.G220X | AD | Portland | Nuclear progressive | [1] |
| *CRYBB1* | Ex6 | c.667C>T | p.Q223X | AD | China | Nuclear progressive | [2] |
| *CRYAA* | Ex1 | c.27G>A | p.W9X | AR | Iran |  | [3] |
| *CRYBB2* | Ex6 | c.463C>T | p.Q155X | AD | USA | Cerulean | [4] |
| *CRYBB2* | Ex6 | c.463C>T | p.Q155X | AD | Switzerland | Central zonular pulverulent | [5] |
| *CRYBB2* | Ex6 | c.463C>T | p.Q155X | AD | India | Sutural cerulean | [6] |
| *CRYBB2* | Ex6 | c.463C>T | p.Q155X | AD | China | Progressive polymorphic | [7] |
| *CRYBB2* | Ex6 | c.463C>T | p.Q155X | AD | Chile | Variable | [8] |
| *CRYBB2* | Ex6 | c.463C>T | p.Q155X | AD | China | Progressive polymorphic coronary | [9] |
| *CRYBB2* | Ex6 | c.463C>T | p.Q155X |  | India | Cortical, pulverulent | [10] |
| *CRYBB2* | Ex6 | c.463C>T | p.Q155X | AD | China | Cerulean | [11] |
| *CRYBB2* | Ex6 | c.463C>T | p.Q155X | AD | Mexico | Pulverulent | [12] |
| *CRYBB2* | Ex6 | c.477C>A | p.Y159X |  | Denmark |  | [13] |
| *CRYGD* | Ex1 | c.51T>G | p.Y17X | Sporadic | USA | Adult-onset cataract family | [14] |
| *CRYGD* | Ex2 | c.168C>G | p.Y56X | AD | Brazil | Nuclear | [15] |
| *CRYGD* | Ex3 | c.301C>T | p.Q101X | AD | China | Nuclear | [16] |
| *CRYGD* | Ex3 | c.403G>T | p.E135X | Sporadic | China | Nuclear | [16] |
| *CRYGD* | Ex3 | c.418C>T | p.R140X | AD | India | Nuclear and posterior polar | [17] |
| *CRYGD* | Ex3 | c.418C>T | p.R140X | AD | Ashkenazi Jewish | Congenital nuclear | [14] |
| *CRYGD* | Ex3 | c.418C>T | p.R140X | AD | India | Nuclear | [18] |
| *CRYGD* | Ex3 | c.448dupG | p.D150GfsX3 | Sporadic | Australia |  | [19] |
| *CRYGD* | Ex3 | c.451\_452insGACT | p.Y151X | AD | China | Nuclear | [20] |
| *CRYGD* | Ex3 | c.453T>G | p.Y151X |  | UK |  | [21] |
| *CRYGD* | Ex3 | c.470G>A | p.W157X | AD | India | Central nuclear | [22] |
| *CRYGD* | Ex3 | c.471G>A | p.W157X | AD | China |  | [23] |
| *CRYGD* | Ex3 | c.494delG | p.G165AfsX3 | AD | China | Nuclear | [24] |
| *CRYGC* | Ex3 | c.327C>A | p.C109X | AD | China | Nuclear | [25] |
| *CRYGC* | Ex3 | c.337C>T | p.Q113X | Sporadic | China | Nuclear | [26] |
| *CRYGC* | Ex3 | c.402C>G | p.Y134X |  | UK |  | [21] |
| *CRYGC* | Ex3 | c.417C>G | p.Y139X | AD | USA | Congenital | [14] |
| *CRYGC* | Ex3 | c.470G>A | p.W157X | AD | China | Nuclear | [24] |
| *CRYGC* | Ex3 | c.470G>A | p.W157X | AD | China | Nuclear | [27] |

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