

Rod Monochromatism		Blue Cone Monochromatism
Severe	Light Aversion	Varies Severe to Moderate
May be complete loss or retain a small amount of specific colors	Color Vision	Incomplete color vision loss and some may see blue - yellow axis
20/120 to 20/200	Visual Acuity	20/60 to 20/200 So some see much better than RM
Usually present May lessen with age	Nystagmus	Usually present but can occur without. May reduce dramatically with age
First six months	Onset	First six Months
Typically only in some siblings	Family	Possible in maternal grandfather, maternal cousins and siblings
Autosomal Recessive Gene from each parent	Inheritance	X-Linked From the female carrier
Chromosomes 1, 2, 8 and 10	Chromosomes	X- Chromosome
CNGB3, CNGA3, GNAT2 and PDE6C	Genes	OPN1LW and OPN1MW
Both Males and Females	Gender	Nearly Exclusively Males Can happen in females but extremely rare
1 in 30,000 Births	Incidence	1 in 50,000 Births to 1 in 100,000
Red or Amber	Typical Filters	Magenta, Amber and Gray