ABSTRACT

A light radiation device capable of effectively expressing the OPN5 gene or activating OPN5 by radiating light to an eye is provided. The device includes a light source that radiates light having a wavelength in a wavelength region overlapping an absorption spectrum of OPN5, and a radiation condition of the light is set to express the OPN5 gene or activate OPN5. A spectrum of the radiated light may be set so that a maximum value of a received effective spectral irradiance, calculated as a per-wavelength product of spectral irradiance in a wavelength region of 280 to 500 nm and a relative absorbance of OPN5 absorption spectral data, is at least 0.2% of a maximum value of a reference effective spectral irradiance calculated from an AM1.5G sunlight spectrum and the OPN5 absorption spectral data.

Representative Figure: Fig. 6