

DESCRIPTION

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| Species Reactivity | Human |
| Specificity | Detects human Melanopsin in direct ELISAs. |
| Source | Monoclonal Mouse IgG _{2A} Clone # 628737 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | NS0 mouse myeloma cell line transfected with human Melanopsin Accession # Q9UHM6 |
| Conjugate | Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm |
| Formulation | Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|-----------------------|----------------------------------|---|
| Flow Cytometry | 0.25-1 µg/10 ⁶ cells | HEK293 Human Cell Line Transfected with Human Melanopsin and eGFP |

PREPARATION AND STORAGE

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| Shipping | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| Stability & Storage | Protect from light. Do not freeze. <ul style="list-style-type: none"> • 12 months from date of receipt, 2 to 8 °C as supplied. |

BACKGROUND

Melanopsin is an opsin-like protein found in the retinal ganglion cells of mammals. Melanopsin is believed to be part of a secondary optical system that parallels that of the classic rod and cone system. This second system reports directly to the suprachiasmatic nucleus and is responsible for regulation of circadian rhythms. Melanopsin is believed to be the primary photopigment responsible for the regulation of these circadian rhythms, and Melanopsin knockout mice have been generated which demonstrate decreased capacity to entrain to light and dark cycles.

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