OPN4 Protein, Rat (Cell-Free, His)

Cat. No.:	HY-P702401
Synonyms:	Melanopsin; Opsin-4
Species:	Rat
Source:	E. coli Cell-free
Accession:	Q8R456 (M1-M474)
Gene ID:	192223
Molecular Weight:	53.9 kDa

PROPERTIES

AA Sequence	MNSPSESRVP SSLTQDPSFT ASPALLQGIW NSTQNISVRV QLLSVSPTTP GLQAAAWVPF PTVDVPDHAH YTLGTVILLV GLTGMLGNLT VIYTFCRNRG LRTPANMLII NLAVSDFLMS FTQAPVFFAS SLYKKWLFGE TGCKFYAFCG AVFGIVSMIT LTAIAMDRYL VITRPLATIG MRSKRRTALV LLGVWLYALA WSLPPFFGWS AYVPEGLLTS CSWDYVTFTP LVRAYTMLLF CFVFFLPLLI IIFCYIFIFR AIRETGRACE GCGESPLRRR QWQRLQSEWK MAKVALIVIL LFVLSWAPYS TVALVGFAGY SHILTPYMSS VPAVIAKASA IHNPIIYAIT HPKYRAAIAQ HLPCLGVLLG VSGQRSHPSL SYRSTHRSTL SSQSSDLSWI SGQKRQESLG SESEVGWTDT ETTAAWGAAQ QASGQSFCSH DLEDGEVKAP SSPQEQKSKT PKTKRHLPSL DRRM
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.22 μm filtered solution of Tris/PBS-based buffer, 6% Trehalose, pH 8.0.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O. For long term storage it is recommended to add 5-50% of glycerol (final concentration). Our default final concentration of glycerol is 50%. Customers could use it as reference.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	OPN4, a photoreceptor with an affinity for cis-retinaldehydes, plays a pivotal role in various light-mediated responses, including the pupillary reflex, photoentrainment, and other non-image forming reactions. Its involvement extends to potential participation in the optokinetic visual tracking response, showcasing its multifaceted role in visual processes. Additionally, OPN4 may contribute to the regulation of retinal hyaloid vessel growth and regression, further emphasizing its significance in orchestrating intricate aspects of ocular physiology.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA