

## Recombinant Full Length Human PDE6A Protein, Flag tagged

Cat. No. PDE6A-22HFL    Lot. No. (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Purified recombinant protein of Human phosphodiesterase 6A, cGMP-specific, rod, alpha (PDE6A), full length, with N-terminal His tag, expressed in E. coli.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>ProteinLength</b>    | 1-860 aa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Description</b>      | <p>This gene encodes the cyclic-GMP (cGMP)-specific phosphodiesterase 6A alpha subunit, expressed in cells of the retinal rod outer segment. The phosphodiesterase 6 holoenzyme is a heterotrimer composed of an alpha, beta, and two gamma subunits. cGMP is an important regulator of rod cell membrane current, and its dynamic concentration is established by phosphodiesterase 6A cGMP hydrolysis and guanylate cyclase cGMP synthesis. The protein is a subunit of a key phototransduction enzyme and participates in processes of transmission and amplification of the visual signal. Mutations in this gene have been identified as one cause of autosomal recessive retinitis pigmentosa.</p> |
| <b>Molecular Mass</b>   | 99.4 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Purity</b>           | > 80% as determined by SDS-PAGE and Coomassie blue staining                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Notes</b>            | For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

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|                       |                                                                                                                                               |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Stability</b>      | Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles. |
| <b>Storage</b>        | Store at -80 centigrade.                                                                                                                      |
| <b>Storage Buffer</b> | 50 mM Tris-HCl, pH 8.0, 8 M urea                                                                                                              |
| <b>Concentration</b>  | >0.05 µg/µL as determined by microplate BCA method                                                                                            |
| <b>Shipping</b>       | Dry Ice                                                                                                                                       |

## GENE INFORMATION

|                        |                                                                                                                                                                                                                                                                 |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | PDE6A phosphodiesterase 6A, cGMP-specific, rod, alpha [ Homo sapiens (human) ]                                                                                                                                                                                  |
| <b>Official Symbol</b> | PDE6A                                                                                                                                                                                                                                                           |
| <b>Synonyms</b>        | PDE6A; phosphodiesterase 6A, cGMP-specific, rod, alpha; PDEA; rod cGMP-specific 3,5-cyclic phosphodiesterase subunit alpha; PDE V-B1; GMP-PDE alpha; cGMP phosphodiesterase alpha subunit; rod photoreceptor cGMP phosphodiesterase alpha subunit; RP43; CGPR-A |
| <b>Gene ID</b>         | 5145                                                                                                                                                                                                                                                            |
| <b>mRNA Refseq</b>     | NM_000440                                                                                                                                                                                                                                                       |
| <b>Protein Refseq</b>  | NP_000431                                                                                                                                                                                                                                                       |
| <b>MIM</b>             | 180071                                                                                                                                                                                                                                                          |
| <b>UniProt ID</b>      | P16499                                                                                                                                                                                                                                                          |

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