# Recombinant RDH8 protein (His tag)

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| **Catalog Number** | 549392 |
| **Synonyms** | Photoreceptor outer segment all-trans retinol dehydrogenase; Short chain dehydrogenase/reductase family 28C member 2 |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | Q9NYR8 |
| **Molecular Weight** | Predictes a molecular mass of 15.45 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band. |

## Product Information

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| **Sequence Region** | 190-311 |
| **Form** | Lyophilized powder |
| **Formulation** | Lyophilized from sterile PBS, pH 7.4 |
| **Purity** | >85%, by SDS-PAGE with Coomassie Brilliant Blue staining. |
| **Endotoxin** | Not tested. |
| **Activity** | Not tested. |
| **Stability** | Samples are stable for up to twelve months from date of receipt at -70℃ |
| **Protein Construction** | DNA encoding 190-311 aa (Q9NYR8) were fused with 6His tag. |

## Storage & Handling

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| **Reconstitution** | Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. |
| **Storage** | Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. |
| **Shipping** | In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature.<br>Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise. |

## Description

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| **Description** | This product is a high-purity recombinant fragment of human Retinol dehydrogenase 8 (RDH8), corresponding to amino acids 190-311. This soluble, stable fragment is ideal for structural studies and enzymatic assays, supporting research into visual pigment regeneration and retinol metabolism.<br>Retinol dehydrogenase 8 (RDH8) is a membrane-bound, multi-pass enzyme that functions as a retinol dehydrogenase with a preference for NADP. It catalyzes the conversion of all-trans-retinal to all-trans-retinol and is implicated in the regeneration of visual pigment under high light intensity conditions, playing a critical role in maintaining retinal health and visual cycle efficiency. The enzyme is localized to cellular membranes, underscoring its involvement in lipid-associated metabolic pathways. |