# Recombinant CDX1 protein (His tag)

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| **Catalog Number** | 544631 |
| **Synonyms** | Caudal-type homeobox protein 1 |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | P47902 |
| **Molecular Weight** | Predictes a molecular mass of 12.75 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band. |

## Product Information

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| **Sequence Region** | 131-223 |
| **Form** | Lyophilized powder |
| **Formulation** | Lyophilized from sterile PBS, pH 7.4 |
| **Purity** | >86%, 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 131-223 aa (P47902) 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** | Introducing the recombinant CDX-1 (131-223) fragment, a highly stable and soluble protein derived from the human Homeobox protein CDX-1. This product is expertly designed for structural and biochemical studies, offering researchers a reliable tool to investigate transcriptional regulation mechanisms in colorectal cancer and intestinal differentiation.<br>Homeobox protein CDX-1 (Caudal-type homeobox protein 1), encoded by the CDX1 gene, is a nuclear protein involved in transcriptional regulation. It plays a critical role in activated KRAS-mediated transcriptional activation of PRKD1 in colorectal cancer cells, where it binds directly to the PRKD1 promoter. Additionally, CDX-1 contributes to terminal intestinal differentiation and exhibits preferential binding to methylated DNA, highlighting its importance in epigenetic regulation and cellular differentiation processes. |