Recombinant CUX2 protein (His tag)

Catalog Number	544043
Synonyms	Homeobox protein cux-2
Species	Human
Expression System	E. coli
Accession	O14529
Molecular Weight	Predictes a molecular mass of 24.14 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 27 kDa band.

Product Information

Sequence Region	176-377
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 176-377 aa (O14529) were fused with 6His tag.

Storage & Handling

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. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	This product is a recombinant fragment (amino acids 176-377) of the human Homeobox protein cut-like 2 (CUX2), a key transcription factor involved in neuronal development. The fragment is engineered for stability and solubility, making it ideal for structural studies and biochemical assays. The full-length Homeobox protein cut-like 2 (CUX2) functions as a transcription factor that plays a critical role in regulating neuronal proliferation and differentiation in the brain. It is specifically involved in dendrite development, branching, dendritic spine formation, and synaptogenesis within cortical layers II-III. CUX2 binds DNA in a sequence-specific manner to control these processes and is localized to the nucleus, as indicated by its subcellular location.