Recombinant EMX2 protein (His tag)

Catalog Number	547197
Synonyms	Empty spiracles homolog 2; Empty spiracles-like protein 2
Species	Human
Expression System	E. coli
Accession	Q04743
Molecular Weight	Predictes a molecular mass of 13.45 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	153-252
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 153-252 aa (Q04743) 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	Recombinant Human EMX2 (Homeobox protein EMX2) Fragment (153-252): A high-quality, stable, and soluble protein fragment designed for structural and biochemical studies. This fragment captures a key region of the EMX2 transcription factor, enabling research into neural development and cellular polarity mechanisms. EMX2 is a transcription factor that collaborates with EMX1 to establish the boundary between the roof and archipallium during brain development. It also works with OTX1/2 to specify cell fates in the central nervous system and plays a critical role in the inner ear by regulating GPR156 distribution and organizing stereociliary bundle orientation across the line of polarity reversal. The protein is localized to the nucleus and has been detected in axons within the olfactory mucosa and glomeruli of the olfactory bulb, highlighting its importance in neural and sensory systems.