Recombinant MIS protein (His tag)

Catalog Number	539682
Synonyms	Anti-Muellerian hormone; AMH; Muellerian-inhibiting substance; MIS
Species	Human
Expression System	E. coli
Accession	P03971
Molecular Weight	Predictes a molecular mass of 13.33 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	452-560
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 452-560 aa (P03971) 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 Muellerian-Inhibiting Factor (AMH) Fragment (aa 452-560) is a high-purity, stable protein fragment designed for structural and biochemical studies. This 109-amino acid segment retains key functional characteristics of the full-length AMH protein, offering researchers a reliable tool for investigating reproductive biology and signaling pathways. Muellerian-Inhibiting Factor (AMH) is a crucial regulatory protein in human reproductive development and function. During male fetal development, AMH induces regression of the Muellerian ducts, ensuring proper male reproductive tract formation. In females, AMH serves as a negative regulator of follicular development, controlling the primordial to primary follicle transition and modulating FSH sensitivity in growing follicles. The protein functions through a specific receptor signaling pathway, binding to AMHR2 and forming heterodimers with type-I receptors (ACVR1 and BMPR1A), ultimately recruiting SMAD proteins for nuclear translocation and gene regulation. As a secreted protein, AMH operates through paracrine and endocrine mechanisms, making it accessible for experimental manipulation and therapeutic targeting. The selected fragment (aa 452-560) represents a stable, soluble domain ideal for investigating AMH's structural properties and molecular interactions.