Recombinant SRRT protein (His tag)

Catalog Number	543532
Synonyms	Arsenite-resistance protein 2
Species	Human
Expression System	E. coli
Accession	Q9BXP5
Molecular Weight	Predictes a molecular mass of 42.23 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 45 kDa band.

Product Information

Sequence Region	413-763
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 413-763 aa (Q9BXP5) 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 recombinant protein product features a stable and soluble 351-amino acid fragment (residues 413-763) of the human Serrate RNA effector molecule homolog (Arsenite-resistance protein 2), encoded by the SRRT gene. It is designed for structural and biochemical studies, offering researchers a reliable tool to investigate key functional regions involved in RNA-mediated gene silencing and neural stem cell regulation. The full-length Serrate RNA effector molecule homolog (SRRT) in Homo sapiens acts as a critical mediator between the cap-binding complex (CBC) and the primary microRNA processing machinery, facilitating RNA-mediated gene silencing by promoting the stability and processing of capped primary miRNA transcripts. It plays a role in cell cycle progression at S phase and modulates sensitivity to arsenite. Additionally, SRRT supports neural stem cell self-renewal by directly binding to and positively regulating the transcription of the SOX2 promoter. The protein is predominantly localized in the nucleus and shuttles between the nucleus and cytoplasm in a CRM1-dependent manner, underscoring its dynamic role in cellular processes.