Recombinant SRTD2 protein (His tag)

Catalog Number	538040
Synonyms	Transcriptional regulator interacting with the PHD-bromodomain 2; TRIP-Br2
Species	Human
Expression System	E. coli
Accession	Q14140
Molecular Weight	Predictes a molecular mass of 10.84 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	1-80
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 1-80 aa (Q14140) 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	Introducing the recombinant SERTA domain-containing protein 2 (TRIP-Br2) fragment (amino acids 1-80), a high-quality tool designed for investigating the functional roles of the SERTA domain. This fragment is ideal for researchers studying transcriptional regulation, E2F signaling pathways, and metabolic processes, offering precise insights into domain-specific mechanisms. SERTA domain-containing protein 2 (TRIP-Br2), encoded by the SERTAD2 gene in Homo sapiens, functions as a coregulator at E2F-responsive promoters, integrating signals from PHD- and bromodomain-containing transcription factors. It can act as both a coactivator and corepressor for E2F1-TFDP1 and E2F4-TFDP1 complexes, thereby modulating the expression of E2F-target genes involved in cell cycle and metabolic regulation. Notably, it plays a role in fat storage by downregulating key genes in adipocyte lipolysis, thermogenesis, and oxidative metabolism. The protein localizes to the nucleus and cytoplasm, with nuclear export mediated by an NES in a XPO1-dependent manner, followed by proteasomal degradation in the cytoplasm. This fragment, encompassing the SERTA domain (residues 33-80), enables focused studies on domain-specific functions without interference from full-length protein complexities.