Recombinant SPDYA protein (His tag)

Catalog Number	547424
Synonyms	Rapid inducer of G2/M progression in oocytes A; RINGO A; hSpy/Ringo A; Speedy-1; Spy1
Species	Human
Expression System	E. coli
Accession	Q5MJ70
Molecular Weight	Predictes a molecular mass of 21.79 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 23 kDa band.

Product Information

Sequence Region	64-231
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 64-231 aa (Q5MJ70) 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 Speedy protein A (SPDYA) fragment (64-231) is a stable and soluble unit derived from human Speedy-1, designed for structural and biochemical studies. This fragment retains key functional properties, enabling research into cell cycle regulation, CDK activation mechanisms, and DNA damage response pathways. Speedy protein A (also known as RINGO A, Speedy-1, or Spy1) is a critical regulator of cell cycle progression in humans. It controls the G1/S phase transition by binding and activating CDK1 and CDK2, promoting cell cycle advancement without requiring CDK2 phosphorylation. Additionally, Speedy protein A supports cell survival during DNA damage through CDK2 activation. The protein is localized to the nucleus, where it modulates cyclin-dependent kinase activity and influences cell division processes. This recombinant fragment provides a valuable tool for investigating its unique kinase activation mechanisms and cellular functions.