# Recombinant SYNCI protein (His tag)

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| **Catalog Number** | 541271 |
| **Synonyms** | Syncoilin intermediate filament 1; Syncoilin-1 |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | Q9H7C4 |
| **Molecular Weight** | Predictes a molecular mass of 38.63 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 45 kDa band. |

## Product Information

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| **Sequence Region** | 169-482 |
| **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 169-482 aa (Q9H7C4) were fused with 6His tag. |

## Storage & Handling

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| **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.<br>Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise. |

## Description

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| **Description** | Recombinant Human Syncoilin (Syncoilin-1) Fragment (residues 169-482) is a stable and soluble protein unit designed for structural and biochemical studies. This fragment supports research into Syncoilin's role in mechanical stress coupling and force transmission in skeletal muscle, offering a reliable tool for investigating intermediate filament functions.<br>Syncoilin (Syncoilin intermediate filament 1) is an atypical type III intermediate filament protein in humans that plays a supportive role in efficiently coupling mechanical stress between the myofibril and fiber exterior. It facilitates lateral force transmission during skeletal muscle contraction but does not form homofilaments or heterofilaments with other intermediate filament proteins. Subcellularly, Syncoilin is located in the cytoplasm and perinuclear region, and in skeletal muscle, it colocalizes with desmin and dystrobrevin at key junctions such as the myotendinous and neuromuscular junctions, sarcolemma, and Z-lines, indicating its importance in muscle integrity and function. |