Recombinant SUH protein (His tag)

Catalog Number	544853
Synonyms	CBF-1; J kappa-recombination signal-binding protein; RBP-J kappa; RBP-J; RBP-JK; Renal carcinoma antigen NY-REN-30
Species	Human
Expression System	E. coli
Accession	Q06330
Molecular Weight	Predictes a molecular mass of 51.92 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 52 kDa band.

Product Information

Sequence Region	1-446
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 1-446 aa (Q06330) 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 RBPJ Fragment (1-446) is a high-quality protein product encompassing the full IPT/TIG domain, designed for studying Notch signaling and transcriptional regulation. This fragment serves as an essential tool for researchers investigating domain-specific functions in cell-fate determination and DNA binding mechanisms. RBPJ (Recombining binding protein suppressor of hairless) is a central transcriptional regulator in Notch signaling, mediating cell-cell communication critical for diverse cell-fate decisions. It functions as a transcriptional repressor when unbound, recruiting histone deacetylase complexes, and switches to an activator upon interaction with Notch intracellular domains, recruiting histone acetylases to activate target genes. RBPJ specifically binds to immunoglobulin kappa-type J segment recombination sequences, methylated DNA, and the oxygen-responsive element of COX4I2, activating transcription under hypoxia. It also negatively regulates the phagocyte oxidative burst during bacterial infections. Predominantly nuclear, RBPJ can translocate to the cytoplasm when interacting with RITA/C12orf52, modulating Notch pathway activity.