Recombinant BRD3 protein (His tag)

Catalog Number	547331
Synonyms	RING3-like protein
Species	Human
Expression System	E. coli
Accession	Q15059
Molecular Weight	Predictes a molecular mass of 18.55 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	2-149
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 2-149 aa (Q15059) 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 BRD3 Bromodomain 1 Fragment (residues 2-149) is a high-purity protein designed for chromatin biology and epigenetic research. This fragment fully encompasses the Bromo 1 domain, enabling targeted studies of acetyl-lysine recognition, histone binding, and transcriptional regulation mechanisms. Bromodomain-containing protein 3 (BRD3) is a chromatin reader protein that recognizes and binds acetylated histones, playing a crucial role in controlling gene expression and remodeling chromatin structures. The full-length protein functions by recruiting transcription factors and coactivators to target gene sites, activating RNA polymerase II machinery for transcriptional elongation. BRD3 specifically binds acetylated lysine residues on histone H2A, H2B, H3, and H4, and is involved in endoderm differentiation through liquid-liquid phase separation with lncRNA DIGIT, promoting binding to histone H3 acetylated at Lys-18. The protein also interacts with non-histone acetylated proteins such as GATA1 and GATA2 to regulate transcription. BRD3 is localized primarily in the nucleus and is detected on chromatin, where it performs its essential epigenetic regulatory functions.