Recombinant BRD2 protein (His tag)

Catalog Number	537633
Synonyms	O27.1.1
Species	Human
Expression System	E. coli
Accession	P25440
Molecular Weight	Predictes a molecular mass of 16.91 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	59-188
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 59-188 aa (P25440) 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 Bromodomain-containing protein 2 (BRD2) fragment (amino acids 59-188) from Homo sapiens, encompassing the full Bromo 1 domain. This high-purity protein is an essential tool for investigating chromatin recognition, histone binding specificity, and transcriptional regulation mechanisms in epigenetic research. Bromodomain-containing protein 2 (BRD2) is a chromatin reader protein that specifically recognizes acetylated lysine residues on histone H4 (H4K5ac and H4K12ac) and plays a critical role in gene expression regulation and chromatin remodeling. Located in the nucleus and associated with chromosomes, BRD2 recruits transcription factors and coactivators to target genes, activates RNA polymerase II-mediated transcriptional elongation, and contributes to genome compartmentalization through interactions with CTCF and cohesin to form topologically associating domains. Additionally, BRD2 binds acetylated non-histone proteins like STAT3, regulating inflammatory responses and T-cell differentiation, and recognizes novel epigenetic marks including acetyl-methylated lysine residues (H4K5acme and H4K12acme) on active chromatin.