

#### DESCRIPTION

**Source** *E. coli*-derived human BRD4 protein  
Glu49 - Glu460 with N-terminal 8-His and (DYKDDDDK) tags  
Accession # O60885.2

**Predicted Molecular Mass** 52 kDa

#### SPECIFICATIONS

**Activity** This protein is useful as a substrate in *in vitro* assays using recombinant E3 Ubiquitin ligases and small molecule degraders. Reaction conditions will need to be optimized for each specific application.

**Purity** >90%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain.

**Formulation** Supplied as a solution in HEPES, NaCl, DTT and Glycerol. See Certificate of Analysis for details.

#### PREPARATION AND STORAGE

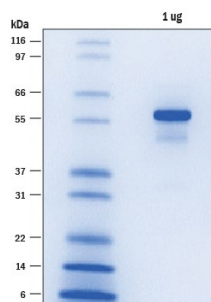
**Shipping** The product is shipped with dry ice or equivalent. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 6 months from date of receipt, -70 °C as supplied.
- 3 months, -70 °C under sterile conditions after opening.

#### DATA

##### SDS-PAGE



**Recombinant Human His8-(DYKDDDDK)-BRD4 (49-460)**  
**Protein SDS-PAGE** 1 µg per lane of Recombinant Human His8-(DYKDDDDK)-BRD4 (49-460) (Catalog # SP-600) was resolved with SDS-PAGE under reducing conditions and visualized by colloidal Coomassie Blue staining, showing a band at 57 kDa.

#### BACKGROUND

Bromodomain-containing protein 4 (BRD4) is a member of the BET class chromatin reader proteins that bind acetylated histones and play a key role in transcriptional regulation and transmission of epigenetic memory. BRD4 has two N-terminal bromodomains and one NET (N-terminal Extra Terminal) domain. BRD bromodomains serve as recognition motifs for acetylated lysine residues on histones, while the NET domain may function by promoting phosphorylation of the C-terminal domain (CTD) of RNA Polymerase II. BRD4 is a potential therapeutic target in many diseases including breast cancer, AML, multiple myeloma, colon cancer and others. This recombinant protein contains an N-terminal portion of BRD4 including both bromodomains. This protein is useful as a substrate in *in vitro* assays using recombinant E3 Ubiquitin ligases and small molecule degraders.

#### References:

1. Devaiah, B.N. *et al.* (2012) *Proc. Natl. Acad. Sci.* **109**:6927.
2. Gadd, M.S. *et al.* (2017) *Nat. Chem. Biol.* **13**:514.
3. Wang, R. *et al.* (2012) *J. Biol. Chem.* **287**:10738.
4. Zhang, W. *et al.* (1994) *J. Biol. Chem.* **269**:43137.