APC445Hu01 100μg
Active Dysferlin (DYSF)
Organism Species: *Homo sapiens* (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression.
Host: *E. coli*
Residues: Met1~Tyr479
Tags: N-terminal His-tag
Purity: >80%
Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).
Buffer Formulation: PBS, pH7.4, containing 0.01% Sarcosyl, 5%Trehalose .
Original Concentration: 200μg/mL
Applications: Activity Assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 5.8
Predicted Molecular Mass: 56.9kDa
Accurate Molecular Mass: 57kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.
Store at 2-8ºC for one month.
Aliquot and store at -80ºC for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37ºC for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

MLRVFILYAE NVHTPDTDIS DAYCSAVFAG VKKRTKVIKN SVNPVWNEGF
EWDLKGIPLD QGSELHVVVK DHETMGRNRF LGEAKVPLRE VLATPSLSAS
FNAPLLDTKK QPTGASLVLQ VSYTPLPGAV PLFPPPTPLE PSPTLPDLDV
VADTGGEEDT EDQGLTGDEA EPFLDQSGGP GAPTTPRKLP SRPPPHYPGI
KRKRSAPTSR KLLSDKPQDF QIRVQVIEGR QLPGVNIKPV VKVTAAGQTK
RTRIHKGNSP LFNETLFFNL FDSPGELFDE PIFITVVDSR SLRTDALLGE
FRMDVGTIYR EPRHAYLRKW LLLSDPDDFS AGARGYLKTS LCVLGPGDEA
PLERKDPSED KEDIESNLLR PTGVALRGAH FCLKVFRAED LPQMDDAVMD
NVKQIFGFES NKKNLVDPFV EVSFAGKMLC SKILEKTANP QWNQNITLPA
MFPSMCEKMR IRIIDWDRLT HNDIVATTY

[ACTIVITY]

Myc Binding Protein (MYCBP), also known as Partner of MYC1 (PAM1), is a critical regulator of the oncoprotein c-Myc. It modulates c-Myc transcriptional activity by stabilizing its interaction with DNA or promoting its proteasomal degradation, thereby influencing cell proliferation, apoptosis, and tumorigenesis. MYCBP is essential for maintaining genomic stability and regulating cell cycle progression. Dysregulation of MYCBP is implicated in cancers, particularly those driven by c-Myc overexpression, such as lymphoma and breast cancer. Additionally, MYCBP interacts with other transcription factors and chromatin remodelers, serving as a scaffold for multiprotein complexes that fine-tune oncogenic or tumor-suppressive signaling pathways.Furthermore ,MYCBP can promote HOXB4 degradation via ubiquitination, negatively regulating hematopoietic stem cell self-renewal to maintain differentiation balance.Thus a functional ELISA assay was conducted to detect the interaction of recombinant human MYCBP and recombinant human HOXB4.Briefly, biotin-linked HOXB4

were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 μl were then transferred to MYCBP-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50μl stop solution to the wells and read at 450/630nm immediately. Measured by its binding ability in a functional ELISA. When Recombinant MYCBP is Immobilized at 2 ug/mL(100 uLwell), the concentration of HOXB4 that produces 50% optimal bindingresponse is found to be approximately 0.21ug/mL.

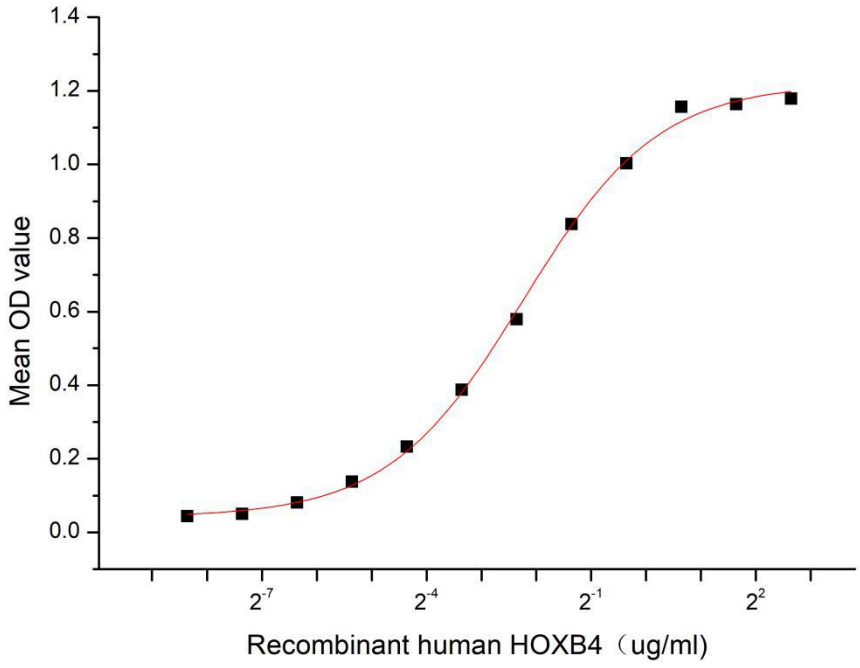

Figure 1. The binding activity of recombinant human MYCBP and recombinant human HOXB4

[IDENTIFICATION]

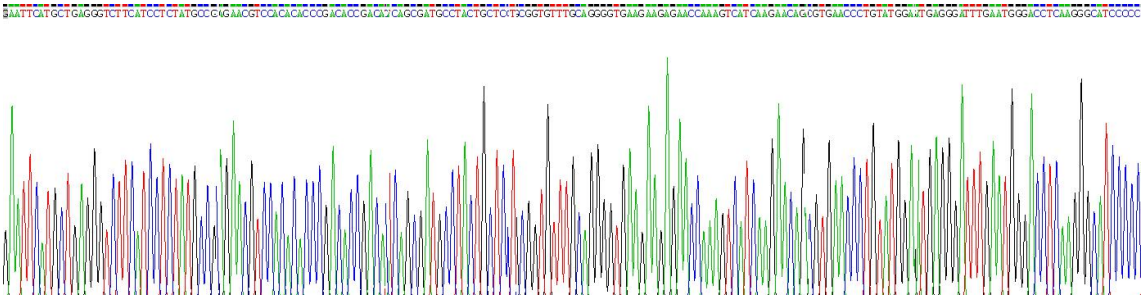

Figure 2. Gene Sequencing (extract)

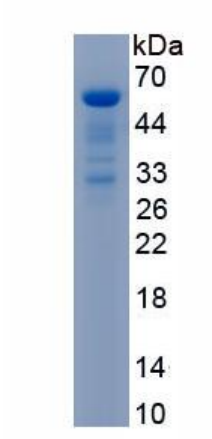

Figure 3. SDS-PAGE

Sample: Active recombinant DYSF, Human

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.