EMPOWER YOUR RESEARCH
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## Product datasheet for TP760041

## BMI1 (NM_005180) Human Recombinant Protein

## Product data:

Product Type:
Description:

Species:
Expression Host:
Expression cDNA Clone or AA Sequence:
Tag:
Predicted MW:

Concentration:
Purity:
Buffer:
Bioactivity:

Note:

Storage:
Stability:

RefSeq:
Locus ID:
UniProt ID:
RefSeq Size:
Cytogenetics:
RefSeq ORF:
Synonyms:

## Recombinant Proteins

Recombinant protein of human BMI 1 polycomb ring finger oncogene (BMI1), full length, with N-terminal HIS tag, expressed in E.Coli, 50ug

Human
E. coli

A DNA sequence encoding human full-length BMI1

## N -His

36.9 kDa
$>0.05 \mu \mathrm{~g} / \mu \mathrm{L}$ as determined by microplate BCA method
$>80 \%$ as determined by SDS-PAGE and Coomassie blue staining
25 mM Tris-HCl, pH 8.0, $150 \mathrm{mM} \mathrm{NaCl}, 100 \mathrm{mM}$ arginine, $10 \%$ glycerol
In vitro kinase assay substrate (PMID: 28270146 )
Binding assay (competitor) (PMID: 29402932)
For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.

Store at $-80^{\circ} \mathrm{C}$.
Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

NP 005171
648
P35226
3435
10p12.2
978
flvi-2/bmi-1; FLVI2/BMI1; PCGF4; RNF51

Summary:

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors
This gene encodes a ring finger protein that is major component of the polycomb group complex 1 (PRC1). This complex functions through chromatin remodeling as an essential epigenetic repressor of multiple regulatory genes involved in embryonic development and self-renewal in somatic stem cells. This protein also plays a central role in DNA damage repair. This gene is an oncogene and aberrant expression is associated with numerous cancers and is associated with resistance to certain chemotherapies. A pseudogene of this gene is found on chromosome $X$. Read-through transcription also exists between this gene and the upstream COMM domain containing 3 (COMMD3) gene. [provided by RefSeq, Sep 2015]

## Product images:



BMI1 competitively inhibits the interaction between MDM2 and the AR-NTD. Purified AR-NTD and GST-MDM2 proteins were incubated with purified His-BMI1 protein (OriGene TP760041) at indicated concentrations at 4 C for 12 hours, followed by GST immunoprecipitation (IP). Both inputs and immunoprecipitated samples were probed with indicated antibodies in Western blot. Figure cited from Nat Commun, PMID: 29402932


CK2alpha phosphorylates BMI1 at serine 110. Purified BMI1 (OriGene TP760041) and CK2alpha reacted in a kinase assay buffer supplemented with nonradioactive ATP. The reaction sample was analyzed with mass spectrometry. The spectrum of the BMI1 phosphopeptide is presented with the extracted ion chromatogram for the peptide with phosphate shown in the inset (indicated by \#). Figure cited from Mol Cancer, PMID: 28270146

