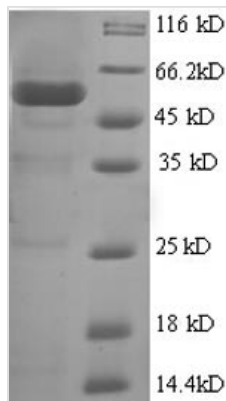




# Recombinant Human Polycomb complex protein BMI-1 (BMI1), partial

<b>Product Code</b>	CSB-EP002726HU1
<b>Relevance</b>	Component of a Polycomb group (PcG) multiprotein PRC1-like complex, a complex class required to maintain the transcriptionally repressive state of many genes, including Hox genes, throughout development. PcG PRC1 complex acts via chromatin remodeling and modification of histones; it mediates monoubiquitination of histone H2A 'Lys-119', rendering chromatin heritably changed in its expressibility. In the PRC1 complex, it is required to stimulate the E3 ubiquitin-protein ligase activity of RNF2/RING2.
<b>Abbreviation</b>	Recombinant Human BMI1 protein, partial
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	P35226
<b>Alias</b>	Polycomb group RING finger protein 4RING finger protein 51
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	Greater than 90% as determined by SDS-PAGE.
<b>Sequence</b>	MHRTTRIKITELNPHLMCVLCGGYFIDATTIIECLHSFCKTCIVRYLETSKYCPIC DVQVHKTRPLLNIKSDKTLQDIVYKLVPLGFKNEMKRRRDFYAAHPSADAANG SNEDRGEVADEDKRIITDDEIISLSIEFFDQNRRLDRKVNKDKEKSKEEVNDKRYL RCPAAMTVMHLRKFLRSKMDIPNTFQIDVMYEEEPLKDYYTLMDIAYIYTWR NGPLPLKYRVRPTCKRMKISHQRDGLTNAGELE
<b>Research Area</b>	Transcription
<b>Source</b>	E.coli
<b>Target Names</b>	BMI1
<b>Expression Region</b>	1-250aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	N-terminal GST-tagged
<b>Mol. Weight</b>	56.4kDa
<b>Protein Length</b>	Partial
<b>Image</b>	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

## Description

The region for expressing recombinant Human BMI1 contains amino acids 1-250. This BMI1 protein is expected to have a theoretical molecular weight of 56.4 kDa. This protein is generated in a e.coli-based system. The N-terminal GST tag was fused into the coding gene segment of BMI1, making it easier to detect and purify the BMI1 recombinant protein in the later stages of expression and purification.

The human polycomb complex protein BMI1 is a vital component of the polycomb repressive complex 1 (PRC1), crucial for epigenetic gene regulation. Its main function involves the transcriptional repression of target genes, influencing cellular processes like cell cycle regulation and stem cell maintenance. BMI1's role in inhibiting the tumor suppressor p16INK4a highlights its significance in controlling cell proliferation. In research, BMI1 is explored for its implications in cancer, stem cell biology, and developmental processes. Understanding BMI1's functions provides insights into epigenetic mechanisms, with potential applications in cancer therapeutics and regenerative medicine.

## Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

## Shelf Life

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