# 重组人PIM1蛋白

Recombinant PIM1 protein (His tag)

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| **目录号 Catalog Number** | 542109 |
| **同用名 Synonyms** | Breakpoint cluster region protein 2; BCRP2; WD repeat-containing protein 22 |
| **种属 Species** | Human |
| **表达系统 Expression System** | E. coli |
| **蛋白编号 Accession** | P11309 |
| **分子量 Molecular Weight** | Predictes a molecular mass of 34.13 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 36 kDa band. |

## 产品信息

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| **氨基酸序列 Amino Acid Sequence** | MSKIKKEPLE SQYQVGPLLG SGGFGSVYSG IRVSDNLPVA IKHVEKDRIS DWGELPNGTR VPMEVVLLKK VSSGFSGVIR LLDWFERPDS FVLILERPEP VQDLFDFITE RGALQEELAR SFFWQVLEAV RHCHNCGVLH RDIKDENILI DLNRGELKLI DFGSGALLKD TVYTDFDGTR VYSPPEWIRY HRYHGRSAAV WSLGILLYDM VCGDIPFEHD EEIIRGQVFF RQRVSSECQH LIRWCLALRP SDRPTFEEIQ NHPWMQDVLL PQETAEIHLH SLSPGPSKLE HHHHHH |
| **性状 Form** | 冻干粉末 Lyophilized powder |
| **组分 Formulation** | Lyophilized from sterile PBS, pH 7.4 |
| **纯度 Purity** | >90%, by SDS-PAGE with Coomassie Brilliant Blue staining. |
| **内毒素 Endotoxin** | Not tested. |
| **活性 Activity** | Not tested. |
| **稳定性 Stability** | Samples are stable for up to twelve months from date of receipt at -70℃ |
| **蛋白构建 Protein Construction** | DNA encoding 31-313 aa (P11309) were fused with C-terminal 6His tag. |

## 保存与运输

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| **复溶 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. |
| **储存 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. |
| **运输 Shipping** | In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature.<br>Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise. |

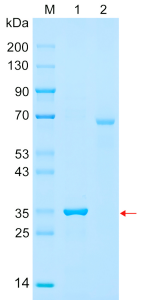
## 功能描述

**研究背景 Background**

Recombinant Human Serine/threonine-protein kinase pim-1 (EC 2.7.11.1) fragment (residues 31-313) is a high-purity protein encompassing the complete protein kinase domain (residues 38-290). This fragment serves as an essential tool for investigating kinase activity, oncogenic signaling pathways, and drug discovery applications related to cell survival and proliferation mechanisms. Serine/threonine-protein kinase pim-1, encoded by the PIM1 gene, functions as a proto-oncogene that promotes cell survival and proliferation through multiple mechanisms. It regulates MYC transcriptional activity, controls cell cycle progression at G1-S and G2-M transitions by phosphorylating CDC25A and CDC25C, and inhibits apoptosis by phosphorylating proapoptotic proteins including BAD, MAP3K5, and FOXO3. The protein also modulates mTORC1 signaling through DEPDC5 phosphorylation and affects drug resistance via ABCG2 transporter activation. In its full-length form, pim-1 localizes to both the cytoplasm and nucleus (isoform 1

## 验证数据

**SDS-PAGE**




Recombinant PIM1 protein (His tag) SDS-PAGE
M: Marker; Lane 1: PIM1; Lane 2: BSA