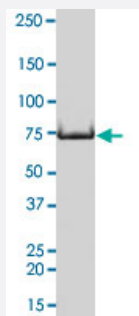


Bioactive

# ABL1 (T315I) (Human) Recombinant Protein

Catalog # P4811      Size 100 ug

## Applications



## Result of activity analysis

Result of activity analysis

□

## Specification

### Product Description

Human ABL1 (NM\_005157.3, 118 a.a. - 535 a.a.) T315I mutant partial recombinant protein expressed in Sf9 cells.

### Sequence

PVNSLEKHSWYHGPPVSRNAAEYLLSSGINGSFLVRESESSPGQRSISLRYEGRVYHYRINTASDGK  
LYVSSESFRNTLAELVHHHSTVADGLITTLHYPAPKRNKPTVYGVSPNYDKWEMERTDITMKHKL  
GGQYGEVYEGVWKKYSLTVAVKTLKEDTMEVEEFLKEAAVMKEIKHPNLVQLLGVC TREPPFYIII  
FMTYGNLLDYLRECNRQEVNAVVLVYMATQISSAMEYLEKKNFIHRDLAARNCLVGENHLVKVADF  
GLSRLMTGDTYTAHAGAKFPIKWTAPESLAYNKFSIKSDVWAFGVLLWEIATYGMSPYPGIDLSQV  
YELLEKDYRMERPEGCEKVVYELMRACWQWNPSDRPSFAEIHQAFETMFQESSISDEVEKELG  
KQGVRGAVSTLLQAPELPTKTRTS

### Host

insect

### Theoretical MW (kDa)

76.179

|                         |                                                                                         |
|-------------------------|-----------------------------------------------------------------------------------------|
| Form                    | Liquid                                                                                  |
| Preparation Method      | Insect cell (Sf9) expression system                                                     |
| Purification            | GST affinity chromatography                                                             |
| Concentration           | 0.126 ug/uL                                                                             |
| Activity                | 10 pmol/ug x min                                                                        |
| Quality Control Testing | 2 ug/lane SDS-PAGE Stained with Coomassie Blue                                          |
| Storage Buffer          | In 50 mM Hepes, 100 mM NaCl, pH 7.5 (5 mM DTT, 15 mM reduced glutathione, 20% glycerol) |
| Storage Instruction     | Store at -80°C.<br>Aliquot to avoid repeated freezing and thawing                       |
| Note                    | Result of activity analysis<br>Result of activity analysis                              |

## Applications

- Functional Study
- SDS-PAGE

## Gene Info — ABL1

|                    |                                            |
|--------------------|--------------------------------------------|
| Entrez GeneID      | <a href="#">25</a>                         |
| Protein Accession# | <a href="#">NM_005157.3</a>                |
| Gene Name          | ABL1                                       |
| Gene Alias         | ABL, JTK7, bcr/abl, c-ABL, p150, v-abl     |
| Gene Description   | c-abl oncogene 1, receptor tyrosine kinase |
| Omim ID            | <a href="#">189980</a>                     |
| Gene Ontology      | <a href="#">Hyperlink</a>                  |

**Gene Summary**

The ABL1 protooncogene encodes a cytoplasmic and nuclear protein tyrosine kinase that has been implicated in processes of cell differentiation, cell division, cell adhesion, and stress response. Activity of c-Abl protein is negatively regulated by its SH3 domain, and deletion of the SH3 domain turns ABL1 into an oncogene. The t(9;22) translocation results in the head-to-tail fusion of the BCR (MIM:151410) and ABL1 genes present in many cases of chronic myelogenous leukemia. The DNA-binding activity of the ubiquitously expressed ABL1 tyrosine kinase is regulated by CDC2-mediated phosphorylation, suggesting a cell cycle function for ABL1. The ABL1 gene is expressed as either a 6- or 7-kb mRNA transcript, with alternatively spliced first exons spliced to the common exons 2-11. [provided by RefSeq]

**Other Designations**

Abelson murine leukemia viral (v-abl) oncogene homolog 1|OTTHUMP00000022375|OTTHUMP0000022376|bcr/c-abl oncogene protein|proto-oncogene tyrosine-protein kinase ABL1|v-abl Abelson murine leukemia viral oncogene homolog 1

**Pathway**

- [Axon guidance](#)
- [Cell cycle](#)
- [Chronic myeloid leukemia](#)
- [ErbB signaling pathway](#)
- [Neurotrophin signaling pathway](#)
- [Pathogenic Escherichia coli infection - EHEC](#)
- [Pathways in cancer](#)

**Disease**

- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Cardiovascular Diseases](#)
- [Chronic Disease](#)
- [Diabetes Complications](#)

- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [HIV Infections](#)
- [Leukemia](#)
- [Metabolic Syndrome X](#)
- [Neoplasms](#)
- [Osteoporosis](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)