

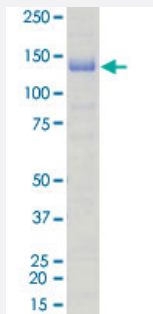
Bioactive

Full-Length

ABL1 (E255K) (Human) Recombinant Protein

Catalog # P5740 Size 5 ug

Applications



Result of activity analysis

Result of activity analysis

□

Specification

Product Description	Human ABL1 (NP_005148.2, 2 a.a. - 1130 a.a.) E255K mutant full length recombinant protein with H is tag expressed in Baculovirus infected Sf21 cells.
Host	insect
Theoretical MW (kDa)	126
Form	Liquid
Preparation Method	Baculovirus infected insect cell (Sf21) expression system
Purification	Ni-NTA affinity chromatography
Purity	78 % by SDS-PAGE/CBB staining

Activity	The activity was measured by off-chip mobility shift assay. The enzyme was incubated with fluorescence-labeled substrate and Mg (or Mn)/ATP. The phosphorylated and unphosphorylated substrates were separated and detected by LabChip™3000. Substrate : ABLtide. ATP: 100 µM.
Quality Control Testing	SDS-PAGE Stained with Coomassie Blue
Storage Buffer	In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.05% Brij35, 1 mM DTT, 10% glycerol)
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of activity analysis Result of activity analysis

Applications

- Functional Study
- SDS-PAGE

Gene Info — ABL1

Entrez GeneID	25
Protein Accession#	NP_005148.2
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	189980
Gene Ontology	Hyperlink
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 CDC 2-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](#)