

Product datasheet

Recombinant human ABL1 (mutated T315I) protein (Active) ab196134

[2 Images](#)

Description

Product name	Recombinant human ABL1 (mutated T315I) protein (Active)	
Biological activity	Specific Activity: 222 pmoles/min/μg. Assay Conditions: Activity was determined using a 100% phosphorylated Tyr02 peptide and a Z-lyte kinase assay. Reaction was incubated at 30°C for 1 hour.	
Purity	> 75 % SDS-PAGE. Affinity purified.	
Expression system	Baculovirus infected Sf9 cells	
Accession	<u>P00519</u>	
Protein length	Protein fragment	
Animal free	No	
Nature	Recombinant	
Species	Human	
Sequence	LGGGQYGEVYEGVWKKYSLTVAVKTLKEDTMEVEEFLKE AAVMKEIKHPN LVQLLGVCTREPPFYIIIEFMTYGNLLDYLRECNRQEVNAV LLYMATQI SSAMEYLEKKNFIHRDLAARNCLVGENHLVKVADFGLSRL MTGDTYTAHA GAKFPIKWTAPESLAYNKFSIKSDVWAFGVLLWEIATYGM SPYPGIDLSQ VYELLEKDYRMERPEGCPEKVYELMRACWQWNPSDRPS FAEIHQAFETMF QESSISDEVEKELGKQGVRGAVSTLLQAPELPTK	
Predicted molecular weight	33 kDa including tags	
Amino acids	248 to 531	
Modifications	mutated T315I	
Tags	His tag N-Terminus	
Additional sequence information	GenBank Accession No. NM_005157. Note: This mutation is often cited as T344I in variant B (GenBank Accession No. NM_007313).	

Specifications

Our **Abpromise guarantee** covers the use of **ab196134** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies SDS-PAGE
Form	Liquid
Additional notes	Previously labelled as c Abl.

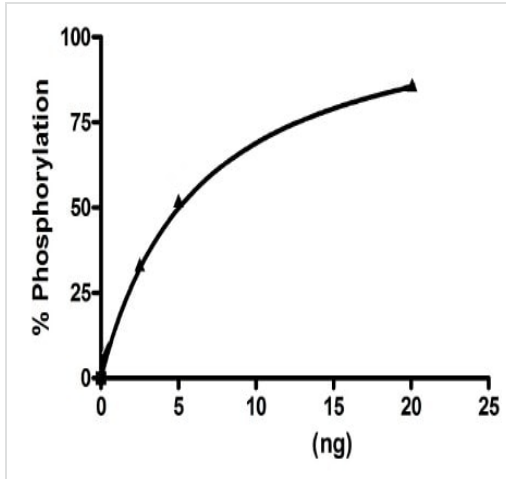
Preparation and Storage

Stability and Storage	Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle. pH: 8.00 Constituents: 0.4% Tris HCl, 0.58% Sodium chloride, 0.05% Tween, 20% Glycerol (glycerin, glycerine), 0.05% (R*,R*)-1,4-Dimercaptobutan-2,3-diol This product is an active protein and may elicit a biological response in vivo, handle with caution.
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General Info

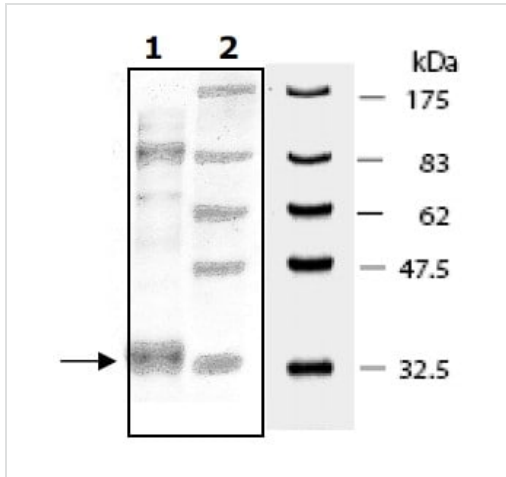
Function	Protein kinase that regulates key processes linked to cell growth and survival. Regulates cytoskeleton remodeling during cell differentiation, cell division and cell adhesion. Localizes to dynamic actin structures, and phosphorylates CRK and CRKL, DOK1, and other proteins controlling cytoskeleton dynamics. Regulates DNA repair potentially by activating the proapoptotic pathway when the DNA damage is too severe to be repaired. Phosphorylates PSMA7 that leads to an inhibition of proteasomal activity and cell cycle transition blocks.
Tissue specificity	Widely expressed.
Involvement in disease	Note=A chromosomal aberration involving ABL1 is a cause of chronic myeloid leukemia. Translocation t(9;22)(q34;q11) with BCR. The translocation produces a BCR-ABL found also in acute myeloid leukemia (AML) and acute lymphoblastic leukemia (ALL).
Sequence similarities	Belongs to the protein kinase superfamily. Tyr protein kinase family. ABL subfamily. Contains 1 protein kinase domain. Contains 1 SH2 domain. Contains 1 SH3 domain.
Post-translational modifications	Phosphorylated by PRKDC (By similarity). DNA damage-induced activation of c-Abl requires the function of ATM and Ser-446 phosphorylation (By similarity). Phosphorylation on Thr-735 is required for binding 14-3-3 proteins for cytoplasmic translocation. Isoform IB is myristoylated on Gly-2.
Cellular localization	Cytoplasm > cytoskeleton. Nucleus. Sequestered into the cytoplasm through interaction with 14-3-3 proteins and Nucleus membrane. The myristoylated c-ABL protein is reported to be nuclear.

Images



Specific activity of ab196134 was determined to be 222 pmol/min/μg

Functional Studies - Recombinant human ABL1 (mutated T315I) protein (Active) (ab196134)



10% SDS-PAGE analysis of ab196134 stained with Coomassie Blue.

Lane 1: ab196134 (4μg)

Lane 2: Protein Marker

SDS-PAGE - Recombinant human ABL1 (mutated T315I) protein (Active) (ab196134)

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