



# Recombinant Protein Technical Manual

## Recombinant Human ABL1/JTK7/p150 Protein (GST Tag)(Active)

RPES1322

### Product Data:

**Product SKU:** RPES1322

**Size:** 20µg

**Species:** Human

**Expression host:** Baculovirus-Insect Cells

**Uniprot:** NP\_009297.2

### Protein Information:

**Molecular Mass:** 74 kDa

**AP Molecular Mass:** 65 kDa

**Tag:** N-GST

**Bio-activity:** The specific activity was determined to be 240 nmol/min/mg using synthetic Abl peptide (EAIYAAPFAKKK) as substrate.

**Purity:** > 75 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

**Shipping:** This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

**Formulation:** Supplied as sterile 50mM Tris, 100mM NaCl, 0.5mM PMSF, 0.5mM EDTA, 0.5mM Reduced Glutathione, pH 8.0

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** ABL;bcr/abl;c-ABL;c-ABL1;JTK7;p150;v-abl

## Immunogen Information:

**Sequence:** Pro 137-Ser 554

## Background:

c-Abl belongs to the class of tyrosine kinases and is the prototype of a subfamily which includes two members, c-Abl and Arg (Abl-related gene). Both proteins are localized at the cell membrane, actin cytoskeleton and cytosol, and c-Abl is present in the nucleus as well. c-Abl is a non-receptor tyrosine kinase that participates in multiple signaling pathways linking the cell surface, cytoskeleton, and the nucleus. Recent in vitro studies have also linked c-Abl to amyloid-beta-induced toxicity and tau phosphorylation. c-Abl has been implicated in many cellular processes including differentiation, division, adhesion, death, and stress response. c-Abl is a latent tyrosine kinase that becomes activated in response to numerous extra- and intra-cellular stimuli. The c-Abl protein is a ubiquitously expressed nonreceptor tyrosine kinase involved in the development and function of many mammalian organ systems, including the immune system and bone. It regulates the cellular response to TAM through functional interaction with the estrogen receptor, which suggests c-Abl as a therapeutic target and a prognostic tumor marker for breast cancer. c-Abl also plays a key role in signaling chemokine-induced T-cell migration. In addition, c-Abl contains NLSs (nuclear localization signals) and DNA-binding sequences important for nuclear functions. c-Abl has become an important therapeutic target in human chronic myeloid leukaemia.