

## Product datasheet

# BTK peptide ab214589

1 Image

### Description

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<b>Product name</b>	BTK peptide
<b>Accession</b>	<b><u>Q06187</u></b>
<b>Animal free</b>	No
<b>Nature</b>	Synthetic
<b>Modifications</b>	phospho Y223

### Specifications

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Our **Abpromise guarantee** covers the use of **ab214589** in the following tested applications.

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

<b>Applications</b>	Blocking - Blocking peptide for Anti-BTK (phospho Y223) antibody [EP420Y] ( <b><u>ab68217</u></b> )
<b>Form</b>	Lyophilized
<b>Additional notes</b>	<ul style="list-style-type: none"><li>- <i>First try to dissolve a small amount of peptide in either water or buffer. The more charged residues on a peptide, the more soluble it is in aqueous solutions.</i></li><li>- <i>If the peptide doesn't dissolve try an organic solvent e.g. DMSO, then dilute using water or buffer.</i></li><li>- <i>Consider that any solvent used must be compatible with your assay. If a peptide does not dissolve and you need to recover it, lyophilise to remove the solvent.</i></li><li>- <i>Gentle warming and sonication can effectively aid peptide solubilisation. If the solution is cloudy or has gelled the peptide may be in suspension rather than solubilised.</i></li><li>- <i>Peptides containing cysteine are easily oxidised, so should be prepared in solution just prior to use.</i></li></ul>

### Preparation and Storage

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<b>Stability and Storage</b>	Shipped at 4°C. Store at -20°C. Information available upon request.
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### General Info

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<b>Function</b>	Plays a crucial role in B-cell ontogeny. Transiently phosphorylates GTF2I on tyrosine residues in
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response to B-cell receptor cross-linking. Required for the formation of functional ARID3A DNA-binding complexes.

### Involvement in disease

Defects in BTK are the cause of X-linked agammaglobulinemia (XLA) [MIM:300755]; also known as X-linked agammaglobulinemia type 1 (AGMX1) or immunodeficiency type 1 (IMD1). XLA is a humoral immunodeficiency disease which results in developmental defects in the maturation pathway of B-cells. Affected boys have normal levels of pre-B-cells in their bone marrow but virtually no circulating mature B-lymphocytes. This results in a lack of immunoglobulins of all classes and leads to recurrent bacterial infections like otitis, conjunctivitis, dermatitis, sinusitis in the first few years of life, or even some patients present overwhelming sepsis or meningitis, resulting in death in a few hours. Treatment in most cases is by infusion of intravenous immunoglobulin.

Defects in BTK may be the cause of X-linked hypogammaglobulinemia and isolated growth hormone deficiency (XLA-IGHD) [MIM:307200]; also known as agammaglobulinemia and isolated growth hormone deficiency or Fleisher syndrome or isolated growth hormone deficiency type 3 (IGHD3). In rare cases XLA is inherited together with isolated growth hormone deficiency (IGHD).

### Sequence similarities

Belongs to the protein kinase superfamily. Tyr protein kinase family. TEC subfamily.

Contains 1 Btk-type zinc finger.

Contains 1 PH domain.

Contains 1 protein kinase domain.

Contains 1 SH2 domain.

Contains 1 SH3 domain.

### Post-translational modifications





Autophosphorylated on Tyr-223 and Tyr-551. Phosphorylation of Tyr-223 may create a docking site for a SH2 containing protein.

### Cellular localization

Cytoplasm. Membrane. Nucleus.

### Images

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BTK peptide (ab214589)

To learn more about our protein and peptide range click [here](#).

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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