

## Product datasheet for **TA336560**

### **BTK Mouse Monoclonal Antibody [Clone ID: 7F12H4]**

#### **Product data:**

<b>Product Type:</b>	Primary Antibodies
<b>Clone Name:</b>	7F12H4
<b>Applications:</b>	ICC/IF, IHC, WB
<b>Recommended Dilution:</b>	Immunohistochemistry: 1:10-1:500, Immunocytochemistry/ Immunofluorescence: 1:200-1:1000, Western Blot: 1:500-1:2000, Immunohistochemistry-Paraffin: 1:200-1:1000
<b>Reactivity:</b>	Human, Primate
<b>Host:</b>	Mouse
<b>Isotype:</b>	IgG1
<b>Clonality:</b>	Monoclonal
<b>Immunogen:</b>	Purified recombinant fragment of BTK expressed in E. coli. [UniProt# Q06187]
<b>Formulation:</b>	PBS, 0.03% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
<b>Concentration:</b>	lot specific
<b>Purification:</b>	Ammonium sulfate precipitation
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store at -20°C as received.
<b>Stability:</b>	Stable for 12 months from date of receipt.
<b>Predicted Protein Size:</b>	77 kDa
<b>Gene Name:</b>	Bruton tyrosine kinase
<b>Database Link:</b>	<a href="#">NP_000052</a> <a href="#">Entrez Gene 695 Human</a> <a href="#">Q06187</a>



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**Background:** BTK, also known as Brutons tyrosine kinase, is a member of the BTK/Tec family of cytoplasmic tyrosine kinases. All members of the family contain SH3 and SH2 domains and, with the exception of Txk and Dsrc28C, also contain a pleckstrin homology (PH) and a Tec homology (TH) domain in their amino termini. BTK plays an important role in B cell development. Activation of B cells by various ligands is accompanied by BTK membrane translocation mediated by its PH domain binding to phosphatidylinositol-3,4,5-trisphosphate. The membrane located BTK is active and associated with transient phosphorylation of two tyrosine residues, Tyr551 and Tyr223. Tyr551 in the activation loop is transphosphorylated by the Src family tyrosine kinase, leading to autophosphorylation at Tyr223 within the SH3 domain, which is necessary for full activation.

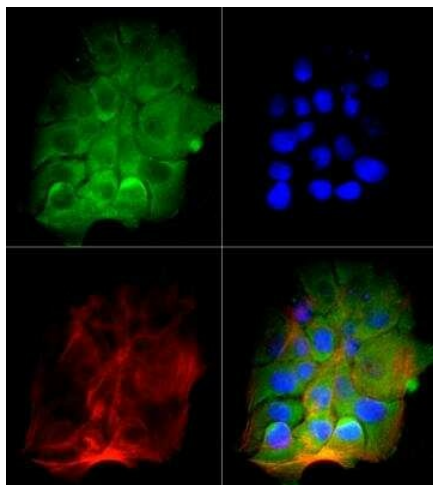
**Synonyms:** AGMX1; AT; ATK; BPK; IMD1; PSCTK1; XLA

**Note:** This BTK (7F12H4) antibody is useful for Western blot, Immunocytochemistry/Immunofluorescence, Immunohistochemistry on paraffin-embedded sections and ELISA.

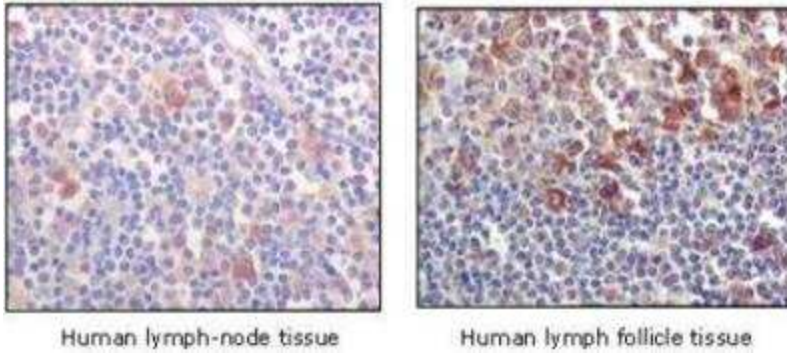
**Protein Families:** Druggable Genome, Protein Kinase

**Protein Pathways:** B cell receptor signaling pathway, Fc epsilon RI signaling pathway, Primary immunodeficiency

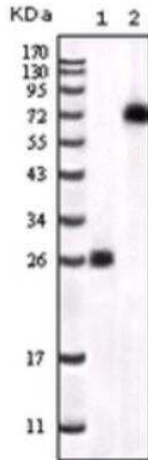
### Product images:



Immunocytochemistry/Immunofluorescence: BTK Antibody (7F12H4) TA336560 - The BTK antibody was tested in A431 cells against DyLight 488 (Green). Actin and nuclei were counterstained for Phalloidin (Red) and DAPI (Blue), respectively.



Immunohistochemistry-Paraffin: BTK Antibody (7F12H4) TA336560 - Immunohistochemical analysis of paraffin-embedded human lymph-node tissues (left) and human lymph follicle tissues (right), showing cytoplasmic and membrane localization using BTK mouse mAb with DAB staining.



Western Blot: BTK Antibody (7F12H4) TA336560 - Analysis of BTK expression in 1) truncated BTK recombinant protein and 2) K562 cell lysate.



Western Blot: BTK Antibody (7F12H4) TA336560 - Analysis of BTK expression in 2) Raji, 3) A431 whole cell lysates and 4) human tonsil tissue extract.