

**XPB1 Antibody (C-Terminus)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS11743****Specification****XPB1 Antibody (C-Terminus) - Product Information**

Application	WB, IHC-P, ICC
Primary Accession	<a href="#">P17861</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	29kDa KDa
Dilution	WB~~1:1000 IHC-P~~N/A ICC~~N/A

**XPB1 Antibody (C-Terminus) - Additional Information****Gene ID** 7494**Other Names**

X-box-binding protein 1 {ECO:0000303|PubMed:2321018, ECO:0000312|HGNC:HGNC:12801}, XPB-1, Tax-responsive element-binding protein 5, TREB-5, X-box-binding protein 1, cytoplasmic form, X-box-binding protein 1, luminal form, XPB1 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=12801" target="\_blank">HGNC:12801</a>)

**Target/Specificity**

17 amino acid peptide from near the carboxy terminus of human XPB-1

**Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

**Precautions**

XPB1 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

**XPB1 Antibody (C-Terminus) - Protein Information****Name** XPB1 ([HGNC:12801](#))**Function**

Functions as a transcription factor during endoplasmic reticulum (ER) stress by regulating the unfolded protein response (UPR). Required for cardiac myogenesis and hepatogenesis during embryonic development, and the development of secretory tissues such as exocrine pancreas and salivary gland (By similarity). Involved in terminal differentiation of B lymphocytes to plasma cells and production of immunoglobulins (PubMed:<a href="http://www.uniprot.org/citations/11460154" target="\_blank">11460154</a>). Modulates the cellular response to ER stress in a

PIK3R-dependent manner (PubMed:<a href="http://www.uniprot.org/citations/20348923" target="\_blank">20348923</a>). Binds to the cis-acting X box present in the promoter regions of major histocompatibility complex class II genes (PubMed:<a href="http://www.uniprot.org/citations/8349596" target="\_blank">8349596</a>). Involved in VEGF-induced endothelial cell (EC) proliferation and retinal blood vessel formation during embryonic development but also for angiogenesis in adult tissues under ischemic conditions. Also functions as a major regulator of the UPR in obesity-induced insulin resistance and type 2 diabetes for the management of obesity and diabetes prevention (By similarity).

#### **Cellular Location**

Endoplasmic reticulum. Note=Colocalizes with ERN1 and KDR in the endoplasmic reticulum in endothelial cells in a vascular endothelial growth factor (VEGF)-dependent manner (PubMed:23529610) [Isoform 2]: Nucleus. Cytoplasm {ECO:0000250|UniProtKB:O35426}. Note=Localizes predominantly in the nucleus. Colocalizes in the nucleus with SIRT1. Translocates into the nucleus in a PIK3R-, ER stress-induced- and/or insulin-dependent manner (By similarity). {ECO:0000250|UniProtKB:O35426}

#### **Tissue Location**

Expressed in plasma cells in rheumatoid synovium (PubMed:11460154). Over-expressed in primary breast cancer and metastatic breast cancer cells (PubMed:25280941). Isoform 1 and isoform 2 are expressed at higher level in proliferating as compared to confluent quiescent endothelial cells (PubMed:19416856)

#### **Volume**

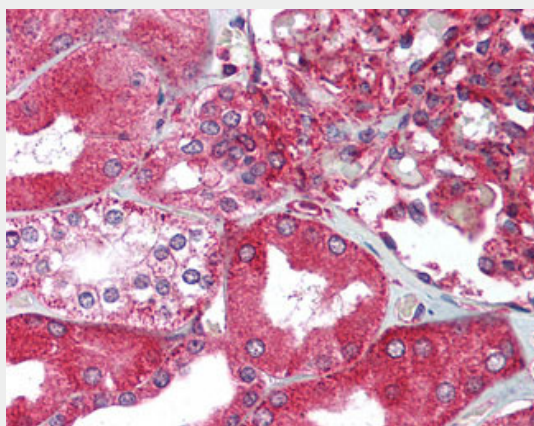
50 µl

#### **XPB1 Antibody (C-Terminus) - Protocols**

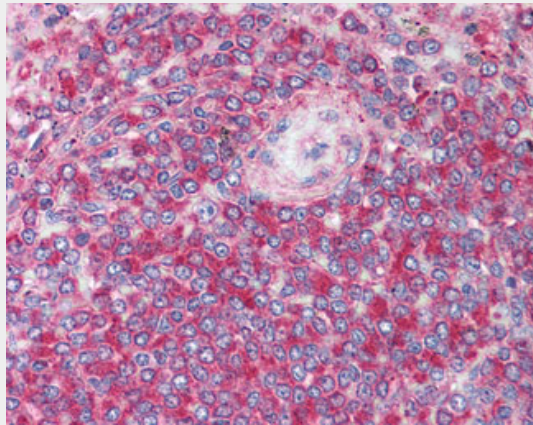
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **XPB1 Antibody (C-Terminus) - Images**



Anti-XBP1 antibody IHC of human kidney.



Anti-XBP1 antibody IHC of human spleen.

### **XBP1 Antibody (C-Terminus) - Background**

Functions as a transcription factor during endoplasmic reticulum (ER) stress by regulating the unfolded protein response (UPR). Required for cardiac myogenesis and hepatogenesis during embryonic development, and the development of secretory tissues such as exocrine pancreas and salivary gland (By similarity). Involved in terminal differentiation of B lymphocytes to plasma cells and production of immunoglobulins (PubMed:11460154). Modulates the cellular response to ER stress in a PIK3R-dependent manner (PubMed:20348923). Binds to the cis-acting X box present in the promoter regions of major histocompatibility complex class II genes (PubMed:8349596). Involved in VEGF-induced endothelial cell (EC) proliferation and retinal blood vessel formation during embryonic development but also for angiogenesis in adult tissues under ischemic conditions. Functions also as a major regulator of the UPR in obesity-induced insulin resistance and type 2 diabetes for the management of obesity and diabetes prevention (By similarity).

### **XBP1 Antibody (C-Terminus) - References**

Liou H.-C., et al. *Science* 247:1581-1584(1990).  
Yoshimura T., et al. *EMBO J.* 9:2537-2542(1990).  
Ponath P.D., et al. *J. Biol. Chem.* 268:17074-17082(1993).  
Yoshida H., et al. *Cell* 107:881-891(2001).  
Collins J.E., et al. *Genome Biol.* 5:R84.1-R84.11(2004).