

XPB1 Antibody (aa2-160)
Mouse Monoclonal Antibody
Catalog # ALS16303**Specification****XPB1 Antibody (aa2-160) - Product Information**

| | |
|-------------------|------------------------|
| Application | ICC, IF, IHC, WB |
| Primary Accession | P17861 |
| Reactivity | Human, Mouse, Rat |
| Host | Mouse |
| Clonality | Monoclonal |
| Calculated MW | 29kDa KDa |

XPB1 Antibody (aa2-160) - 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 (HGNC:12801)

Reconstitution & Storage

Store at 4°C. Stable for one year.

Precautions

XPB1 Antibody (aa2-160) is for research use only and not for use in diagnostic or therapeutic procedures.

XPB1 Antibody (aa2-160) - 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: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).

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)

XBP1 Antibody (aa2-160) - Protocols

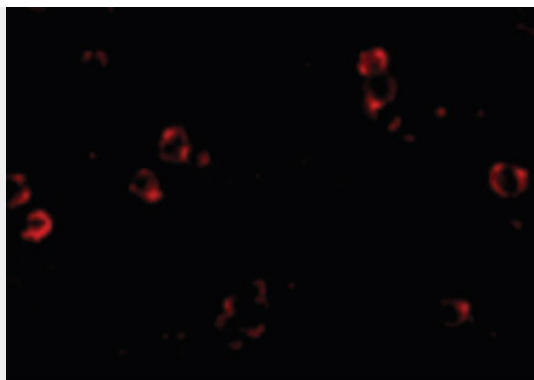
Provided below are standard protocols that you may find useful for product applications.

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

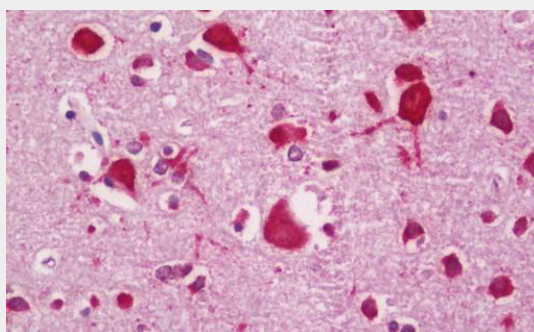
XBP1 Antibody (aa2-160) - Images



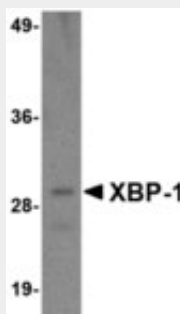
Immunocytochemistry of XBP-1 in HepG2 cells with XBP-1 antibody at 2 ug/ml.



Immunofluorescence of XBP1 in HepG2 cells with XBP1 antibody at 4 ug/ml.



Anti-XBP1 antibody IHC staining of human brain, cortex.



Western blot of 100 ng of XBP-1 recombinant protein with XBP-1 antibody at 1 ug/ml

XBP1 Antibody (aa2-160) - 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 (aa2-160) - References

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Yoshida H.,et al.Cell 107:881-891(2001).
Collins J.E.,et al.Genome Biol. 5:R84.1-R84.11(2004).