10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

XBP1 Antibody (Internal)
Goat Polyclonal Antibody
Catalog # ALS12238

Specification

XBP1 Antibody (Internal) - Product Information

Application	**WB**
Primary Accession	P17861
Reactivity	**Human, Monkey**
Host	**Goat**
Clonality	**Polyclonal**
Calculated MW	**29kDa KDa**

XBP1 Antibody (Internal) - Additional Information

Gene ID 7494

Other Names
X-box-binding protein 1 {ECO:0000303|PubMed:2321018, ECO:0000312|HGNC:HGNC:12801}, XBP-1, Tax-responsive element-binding protein 5, TREB-5, X-box-binding protein 1, cytoplasmic form, X-box-binding protein 1, luminal form, XBP1 (HGNC:12801)

Target/Specificity
Human XBP1. This antibody is expected to recognise isoform XBP1(S) (NP_001073007.1) only.

Reconstitution & Storage
Store at -20°C. Minimize freezing and thawing.

Precautions
XBP1 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

XBP1 Antibody (Internal) - Protein Information

Name XBP1 (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:<a

href="http://www.uniprot.org/citations/8349596" target="_blank">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 (Internal) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

XBP1 Antibody (Internal) - Images



Antibody (1 ug/ml) staining of nuclear HeLa lysate (35 ug protein in RIPA buffer).

XBP1 Antibody (Internal) - 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 (Internal) - 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).