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Anti-XBP1 Antibody (clone 2D9)

Mouse Anti Human Monoclonal Antibody
Catalog # ALS17923

Product Information

Application	WB, IHC-P, E
Primary Accession	P17861
Predicted	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a,k
Clone Names	2D9
Calculated MW	28695
Concentration (mg/ml)	1 mg/ml

Additional Information

Gene ID	7494
Alias Symbol	XBP1
Other Names	XBP1, X-box binding protein 1, X-box-binding protein 1, XBP2, TREB5, XBP-1
Target/Specificity	Human XBP1
Reconstitution & Storage	Protein A purified
Precautions	Anti-XBP1 Antibody (clone 2D9) is for research use only and not for use in diagnostic or therapeutic procedures.

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: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. 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)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.