For Research Use Only

CoraLite® Plus 488-conjugated BZW1 Recombinant monoclonal antibody

Catalog Number:CL488-85655

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Antibodies | ELISA kits | Proteins
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Basic Information

Catalog Number:
CL488-85655

Size:
100ul , Concentration: 1000 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG13830

GenBank Accession Number:
BC001804

GeneID (NCBI):
9689

UNIPROT ID:
Q7L1Q6

Full Name:
basic leucine zipper and W2 domains 1

Calculated MW:
353 aa, 41 kDa

Purification Method:
Protein A purification

CloneNo.:
243162H4

Recommended Dilutions:
IF/ICC: 1:50-1:500

Excitation/Emission maxima wavelengths:
493 nm / 522 nm

Applications

Tested Applications:
IF/ICC

Species Specificity:
human

Positive Controls:

IF/ICC : HepG2 cells,

Background Information

BZW1, also known as basic leucine zipper and W2 domains 1, is a member of the basic leucine zipper (bZIP) superfamily of transcription factors. It is a 45 kDa protein that contains an N-terminal bZIP domain for protein interactions and a C-terminal nucleotide (ATP or GTP) binding domain. Human BZW1 can activate transcription of the histone H4 gene and serve as a co-regulator with other transcription factors to control the cell cycle. In recent years, BZW1 has been identified as enhancing phosphorylation to promote glycolysis in pancreatic ductal adenocarcinoma. Moreover, BZW1 has been found to regulate the cell cycle in ovarian cancer, thereby promoting its progression. Additionally, BZW1 plays a crucial role in mucoepidermoid carcinoma of the salivary glands. BZW1 is also involved in the regulation of translation initiation, acting as a translational rheostat and autoregulating its own translation. It has been suggested that BZW1, as well as its paralog BZW2, is an eIF5-mimic protein. BZW1 has been shown to facilitate glycolysis and promote tumor growth in pancreatic ductal adenocarcinoma through potentiating eIF2α phosphorylation, and it may serve as a therapeutic target for patients with pancreatic cancer. In macrophages, activation of BZW1 by CEBPB promotes eIF2α phosphorylation-mediated metabolic reprogramming and endoplasmic reticulum stress. BZW1 has also been found to be associated with the Wnt/β-catenin pathway in lung adenocarcinoma, potentially influencing epithelial-mesenchymal transition (EMT) processes.

Storage

Storage:
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.
Storage Buffer:
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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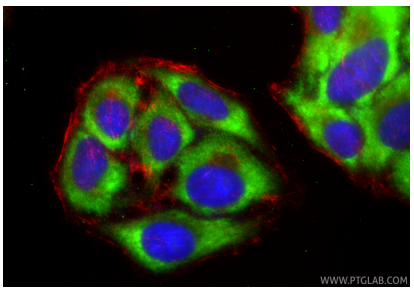
Selected Validation Data



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using CoraLite® Plus 488 BZW1 antibody (CL488-85655, Clone: 243162H4) at dilution of 1:200, CL594-Phalloidin (red).