For Research Use Only

CoraLite®594-conjugated ATF4 Monoclonal antibody

Catalog Number: CL594-60035

Featured Product

2 Publications



Basic Information

Catalog Number:

GenBank Accession Number: BC022088

Purification Method: Protein G purification

CL594-60035

GeneID (NCBI):

CloneNo.: 3E4C5

100ul, Concentration: 1000 ug/ml by 468 Nanodrop:

UNIPROT ID:

Recommended Dilutions:

P18848

FC (Intra): 0.40 ug per 10^6 cells in a 100 ul suspension

Mouse

Full Name:

Isotype: lgG1

activating transcription factor 4 (tax- Excitation/Emission maxima responsive enhancer element B67)

wavelengths:

Immunogen Catalog Number:

Calculated MW:

588 nm / 604 nm

AG1279

39 kDa Observed MW:

45-50 kDa

Applications

Tested Applications:

FC (Intra)

Cited Applications:

Species Specificity:

human

Cited Species:

mouse

Positive Controls:

FC (Intra): HeLa cells,

Background Information

ATF4 is a transcription factor, that accumulates predominantly in osteoblasts, where it regulates terminal osteoblast differentiation and bone formation. As a basic leucine-zipper (bZip) transcription factor, ATF4 can regulate amino acid metabolism, cellular redox state, and anti-stress responses. It also regulates age-related and diet-induced obesity and glucose homeostasis in mammals, and has conserved metabolic functions in flies. Due to its location at chromosome 22q13, a region linked to schizophrenia, ATF4 is considered as a positional candidate gene for schizophrenia. Otherwise, since ATF4 is induced by tumour microenvironmental factors, and regulates processes relevant to cancer progression, it might serve as a potential therapeutic target in cancer. This antibody is a mouse monoclonal antibody raised against full length human ATF4 antigen. This anitbody is conjugated with CL594, Ex/Em 593 nm/614 nm.

Notable Publications

Author	Pubmed ID	Journal	Application
Zhixiong Liu	35143418	J Clin Invest	WB
Masaki Ishikawa	38355795	Nature	FC

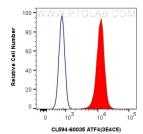
Storage

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



1X10^6 HeLa cells were intracellularly stained with 0.4 ug Coralite® 594 Anti-Human ATF 4 (CL594-60035, Clone:3E4C5) (red), or 0.4 ug Coralite® 594 Mouse 1gG1 Isotype Control (MOPC-21) (CL594-65124, Clone: MOPC-21) (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.