Anti-DDIT3 Antibody

ER1803-20

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse
Applications:	WB, FC
Molecular Wt:	Predicted band size: 19 kDa

Description: DDIT3 also named GADD 153 which has been described as a growth arrest and DNA damage-inducible gene that encodes a C/EBP-related nuclear protein. This protein has also been designated C/EBP-homologous protein (CHOP-10). GADD 153 expression is induced by a variety of cellular stresses, inducing nutrient deprivation and metabolic perturbations. GADD 153 functions to block cells in G1 to S phase in cell cycle progression and acts by dimerizing with other C/EBP proteins to direct GADD 153 dimers away from "classical" C/EBP binding sites, recognizing instead unique "nonclassical" sites. Thus GADD 153 acts as a negative modulator of C/EBP-like proteins in certain terminally differentiated cells, similar to the regulatory function of Id on the activity of Myo D and Myo D-related proteins involved in the development of muscle cells.

Immunogen: Synthetic peptide within human DDIT3 aa 60-130

Positive control: Mouse brain tissue lysate, LOVO, mouse testis tissue lysate.

Subcellular location: Nucleus, Cytoplasm.

Database links: SwissProt: P35638 Human | P35639 Mouse

Recommended Dilutions:

WB	1:500-1:2,000
FC	1:50-1:100

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Immunogen affinity purified.

Images

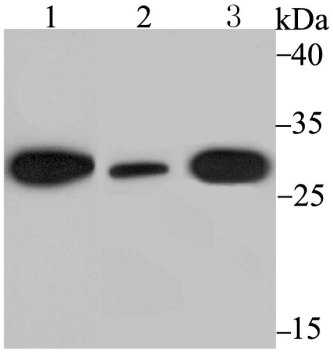

Fig1: Western blot analysis of DDIT3 on different lysates using anti-DDIT3 antibody at 1/500 dilution.
Positive control:
Lane 1: Mouse testis tissue
Lane 2: LOVO
Lane 3: Mouse brain tissue

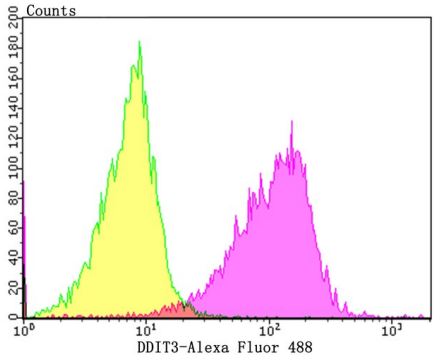

Fig2: Flow cytometric analysis of HepG2 cells with DDIT3 antibody at 1/50 dilution (fuchsia) compared with an unlabelled control (cells without incubation with primary antibody; yellow). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Yamaguchi H et al. CHOP is involved in endoplasmic reticulum stress-induced apoptosis by enhancing DR5 expression in human carcinoma cells. J Biol Chem 279:45495-45502 (2004).
2. Ohoka N et al. TRB3, a novel ER stress-inducible gene, is induced via ATF4-CHOP pathway and is involved in cell death. EMBO J 24:1243-1255 (2005).