TXNIP (D5F3E) Rabbit mAb

For Research Use Only. Not For Use In Diagnostic Procedures.

Applications | Species Cross-Reactivity* | Molecular Wt. | Isotype
--- | --- | --- | ---
W, IP | H, M, R, Mk | 55 kDa | Rabbit IgG**
Endogenous

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.

Background: The ubiquitously expressed thioredoxin-interacting protein (TXNIP) binds and inhibits thioredoxin to regulate cellular redox state (1-3). Research studies demonstrate that hyperglycemia induces TXNIP expression and increases cellular oxidative stress (1). In addition, these studies show that TXNIP reduces glucose uptake directly by binding the glucose transporter Glut1 to stimulate receptor internalization or indirectly by reducing Glut1 mRNA levels (3). Additional studies indicate that TXNIP plays a role in the regulation of insulin mRNA transcription (4). Microarray analyses indicate that TXNIP acts downstream of PPARα and is a putative tumor suppressor that may control thyroid cancer cell progression (5). In addition, the TXNIP protein may be a potential therapeutic target for the treatment of type 2 diabetes and some disorders related to ER-stress (6).

Specificity/Sensitivity: TXNIP (D5F3E) Rabbit mAb recognizes endogenous levels of total TXNIP protein.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val337 of human TXNIP protein.

Background References:

Recommended Antibody Dilutions:
Western blotting 1:1000
Immunoprecipitation 1:50

For product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

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