

Datasheet for 600-401-J38**EDC3 phospho S161 Antibody****Overview**

Description:	Anti-EDC3 pS161 (RABBIT) Antibody - 600-401-J38
Item No.:	600-401-J38
Size:	100 µg
Applications:	IF, WB
Reactivity:	Mouse
Host Species:	Rabbit

Product Details

Background:	EDC3 antibody is associated with an mRNA-decapping complex required for removal of the 5-prime cap from mRNA prior to its degradation from the 5-prime end. It has also been implicated in cell signaling involving the 14-3-3 proteins and related pathways. Anti-EDC3 [pS161] antibody is ideal for investigators interested in Epigenetic and Nuclear Signaling research.
Synonyms:	rabbit anti-EDC3 pS161 Antibody, Enhancer of mRNA-decapping protein 3, YjeF domain-containing protein 1, Edc-3, Edc 3, Yjdc
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Edc3
Reactivity:	Mouse
PTM Specificity:	Phosphorylation
Immunogen Type:	Conjugated Peptide
Immunogen:	EDC3 affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic phospho-peptide surrounding the pS161 site of mouse EDC3.

Purity/Specificity: Anti-EDC3 pS161 is specific for phospho S161 mouse EDC3. It was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross-reactivity with rabbit, pig, monkey, bovine, rat, mouse, and bat based on 100% sequence homology. Cross-reactivity with EDC3 pS161 from other sources has not been determined.

Relevant Links:

- [UniProtKB - Q8K2D3](#)

Application Details

Suggested Applications: IF, WB (Based on references)

Application Note: Anti-EDC3pS161 antibody is useful for ELISA, immunohistochemistry, and Western Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~55kDa corresponding to the appropriate cell lysate or extract.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1: 10,000

WB: 0.5ug/ml

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 1.0 mg/ml by UV absorbance at 280 nm

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservative: 0.05% (w/v) Sodium Azide

Stabilizer: 30% Glycerol

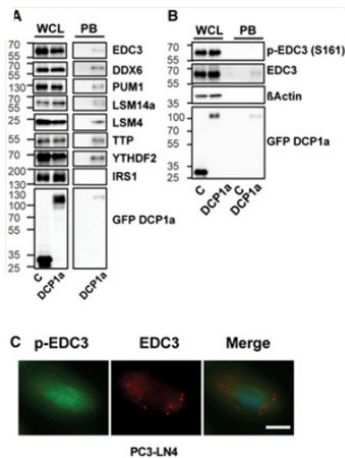
Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Immunofluorescence Microscopy

Western Blot and Immunofluorescence of Anti-EDC3 phospho S161 status in P-bodies.

A, B. Western blot of whole cell lysates (WCL) and P-body (PB) purified from PC3-LN4 cells stably expressing GFP or GFP-DCP1a used as a P-body tag. The P-bodies (PB) were isolated with GFP-Trap beads and analyzed by Western blotting with the indicated Abs.

C. Immunofluorescence (IF) of PC3-LN4 cells under normal culture condition with anti-phospho-EDC3, anti-EDC3 Abs, and DAPI. Images captured under 40x magnification; scale bar: 10 μm. Fig 5. PMID: 33586867.

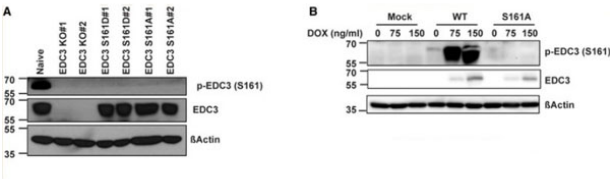
Western Blot

Western blot of Anti-EDC3 phospho S161 Antibody.

EDC3 S161 influences cellular growth and migration.

A. Western blot of lysates prepared from CRISPR/Cas9 PC3-LN4 EDC3 KO (#1, 2) cells, EDC3 S161A (#1, 2), EDC3 S161D (#1, 2) mutants, and parental cells with the indicated Abs.

B. PC3-LN4 EDC3 KO cells containing doxycycline (DOX)-inducible EDC3 WT, S161A, or vector control (Mock) were treated for 48 h with 0, 75, and 150 ng/ml DOX. All extracts were subjected to Western blotting with the indicated Abs. Fig EV5. PMID: 33586867.

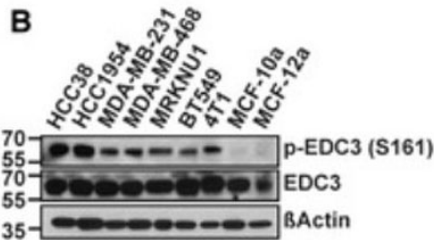


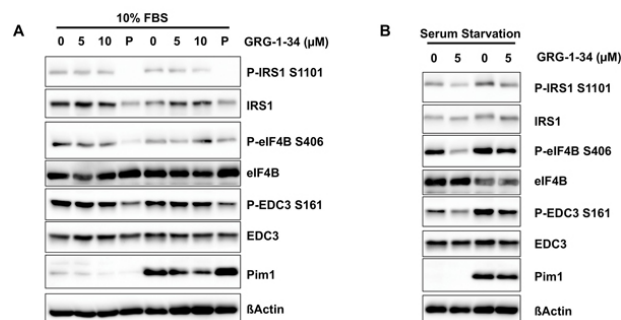
Western Blot

Western blot of Anti-EDC3 phospho S161 Antibody.

P-EDC3 levels regulate tumor growth and are elevated in multiple breast cancer cell lines.

B. Phosphorylated EDC3 levels were examined in normal immortalized breast cell lines, MCF10A and MCF12A, human breast cancer cell lines HCC38, HCC1954, MDA-MB-231, MDA-MD-468, BT-549, MRKNU1, and mouse 4T1 by Western blotting with the indicated Abs. Fig 8. PMID: 33586867.





Western Blot

A) LNCaP and LNCaP stably expressed Pim1 cells were treated with DMSO, 5 and 10 μM of GRG 1–34, and 3 μM of Pim447 (P) in 10% FBS medium for 24h. B) LNCaP and LNCaP stably expressed Pim1 cells were treated with DMSO and GRG-1-34 (5 μM) without FBS medium for 6 h. Lysates (25 μg) were subjected to western blotting with the antibodies for P-IRS1 (S1101), IRS1, P-eIF4B (S406), eIF4B, P-EDC3 (S161), EDC3, Pim1, and β-Actin. Fig 8. PMID: 36389181

References

- Gnawali GR et al. Synthesis of 2-Oxoquinoline Derivatives as Dual Pim and mTORC Protein Kinase Inhibitors. *Med Chem Res.* (2022)
- Bearss JJ et al. EDC3 phosphorylation regulates growth and invasion through controlling P-body formation and dynamics. *EMBO Rep.* (2021)

Disclaimer

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