

Product Datasheet

EFTUD2 Antibody NB100-40849

Unit Size: 0.1 ml

Store at 4C. Do not freeze.

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NB100-40849**EFTUD2 Antibody****Product Information**

Unit Size	0.1 ml
Concentration	0.2 mg/ml
Storage	Store at 4C. Do not freeze.
Clonality	Polyclonal
Preservative	0.09% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	TBS and 0.1% BSA

Product Description

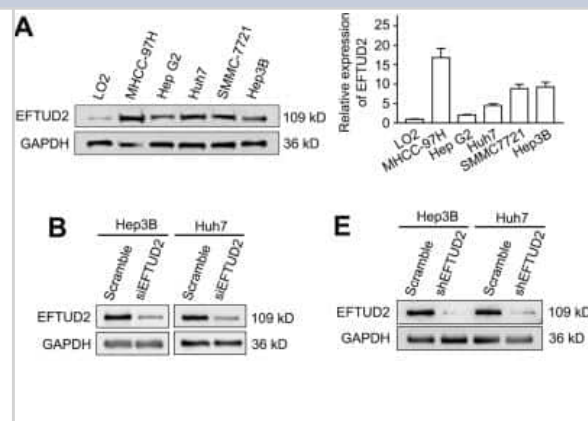
Host	Rabbit
Gene ID	9343
Gene Symbol	EFTUD2
Species	Human, Mouse
Immunogen	The immunogen recognized by this antibody maps to a region between residue 1 and 50 of human Elongation Factor Tu GTP Binding Domain Containing 2 (U5 snRNP-Specific Protein, 116 kD) using the numbering given in entry NP_004238.2 (GeneID 9343).

Product Application Details

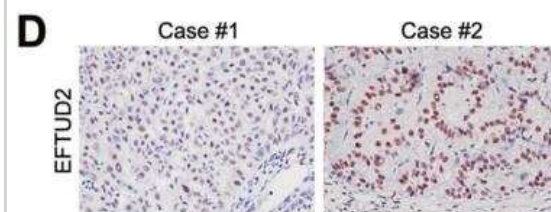
Applications	Western Blot, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation, Knockdown Validated
Recommended Dilutions	Western Blot 1:2000-1:10000, Immunohistochemistry 1:200-1:1000, Immunoprecipitation 2-5 ug/mg lysate, Immunohistochemistry-Paraffin 1:200-1:1000, Knockdown Validated
Application Notes	Epitope retrieval with citrate buffer pH6.0 is recommended for FFPE tissue sections.

Images

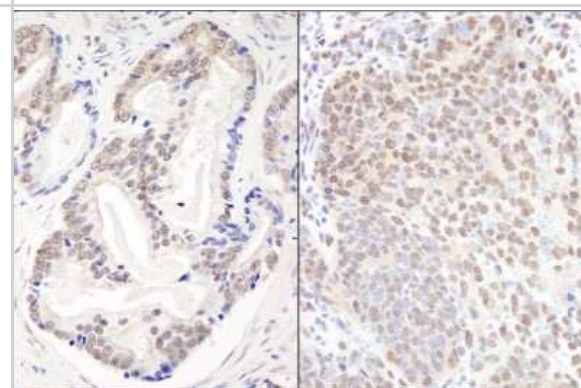
Knockdown Validated: EFTUD2 Antibody [NB100-40849] - a The protein and mRNA levels of EFTUD2 expression in HCC cells detected by western blot and qPCR. b Western blot analysis of EFTUD2 expression in Hep3B and Huh7 cells infected with siRNA against EFTUD2 (siEFTUD2). e Western blot analysis of EFTUD2 protein expression in Hep3B and Huh7 cells infected with lentiviruses expressing either scrambled shRNA or shRNA against EFTUD2 (shEFTUD2). Image collected and cropped by CiteAb from the following publication (<https://www.nature.com/articles/s41419-020-03040-5>) licensed under a CC-BY license.



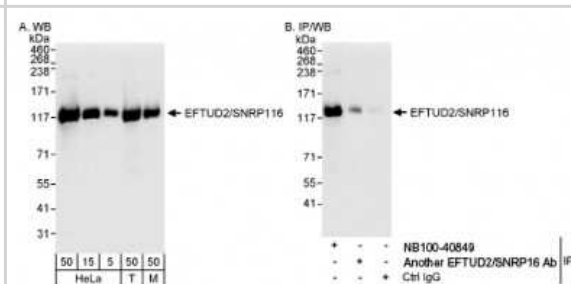
Immunohistochemistry: EFTUD2 Antibody [NB100-40849] - Serial sections of human HCC tissue samples were subjected to IHC staining with antibodies against EFTUD2. Representative IHC images from 50 human HCC tissue samples. Scale bars, 100 μ m. Image collected and cropped by CiteAb from the following publication (<https://www.nature.com/articles/s41419-020-03040-5>) licensed under a CC-BY license.



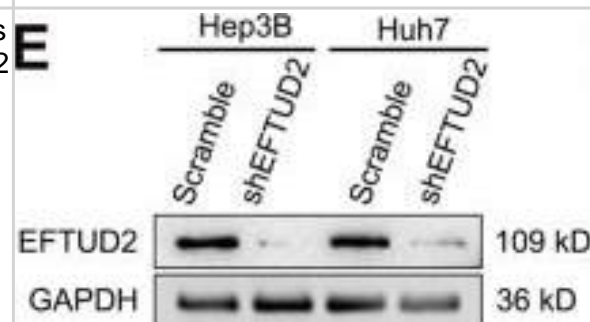
Immunohistochemistry-Paraffin: EFTUD2 Antibody [NB100-40849] - Sample: FFPE section of human prostate carcinoma (left) and mouse teratoma (right). Antibody: Affinity purified rabbit anti-EFTUD2/SNRP116 used at a dilution of 1:200 (1 μ g/ml). Detection: DAB



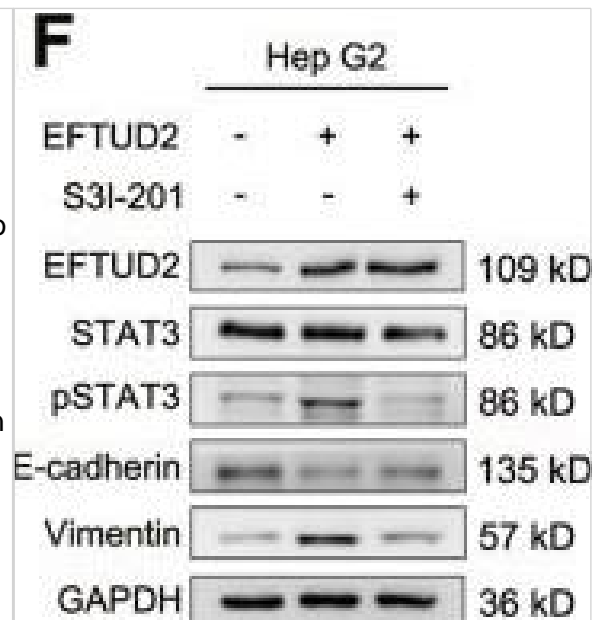
Immunoprecipitation: EFTUD2 Antibody [NB100-40849] - Whole cell lysate from HeLa (5, 15 and 50 μ g for WB; 1 mg for IP, 20% of IP loaded), 293T (T; 50 μ g) and mouse NIH3T3 (M; 50 μ g) cells. Affinity purified rabbit anti- EFTUD2/SNRP116 antibody 0.04 μ g/ml (A) and 0.1 μ g/ml (B) and used for IP at 3 μ g/mg lysate (B).



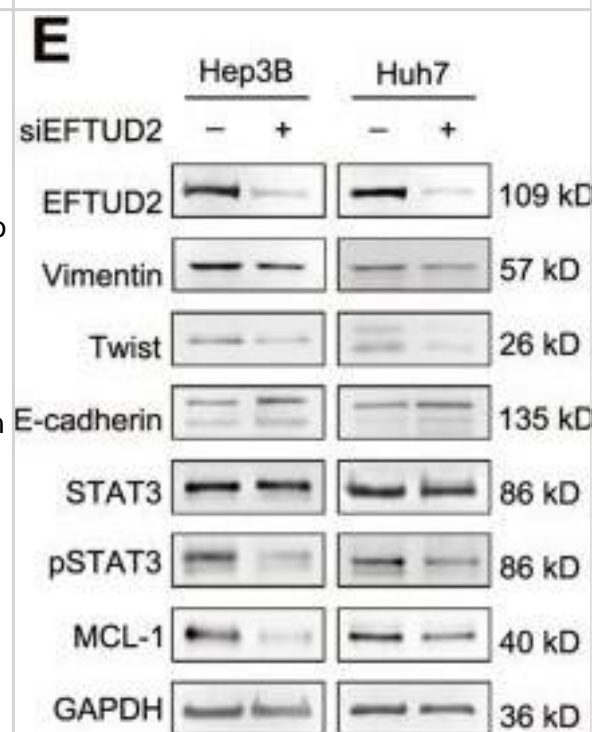
Western Blot: EFTUD2 Antibody [NB100-40849] - EFTUD2 expression is necessary for HCC cell survival. a The protein & mRNA levels of EFTUD2 expression in HCC cells detected by western blot & qPCR. b Western blot analysis of EFTUD2 expression in Hep3B & Huh7 cells infected with siRNA against EFTUD2 (siEFTUD2). c. d The effect of EFTUD2 on cellular viability was detected by CCK8 assays & colony formation assays, respectively. e Western blot analysis of EFTUD2 protein expression in Hep3B & Huh7 cells infected with lentiviruses expressing either scrambled shRNA or shRNA against EFTUD2 (shEFTUD2). f Representative images show the cell morphological changes after the stable knockdown of EFTUD2. Scale bars, 100 μ m. g, h CCK8 assays & colony formation assays show the effect of EFTUD2 on cellular survival in Hep3B & Huh7 cells with a stable knockdown of EFTUD2. The data are presented as means \pm SD. *P < 0.05; **P < 0.01; ***P < 0.001. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/33024090/>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



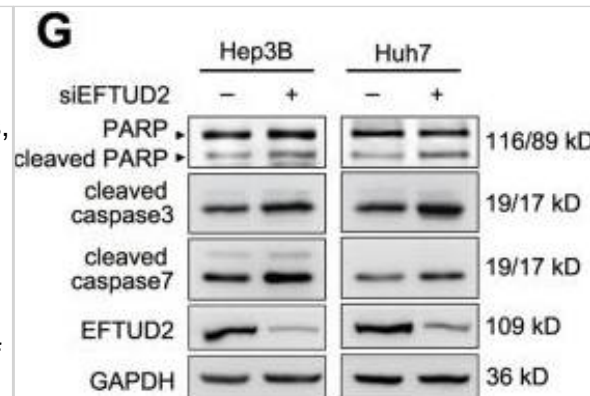
Western Blot: EFTUD2 Antibody [NB100-40849] - EFTUD2 promotes EMT via activation of the STAT3 pathway in HCC cells. a An M-A plot showed the genes differentially expressed between EFTUD2-overexpressing & control Hep G2 cells (N = 3), with the differentially regulated genes highlighted in red. b Gene sets of the IL6_JAK_STAT3 signaling pathway & the EMT were enriched in EFTUD2-overexpressing Hep G2 cells. c Serial sections of the xenograft tumors were subjected to IHC staining of EFTUD2, pSTAT3, E-cadherin & vimentin. Scale bars, 100 μ m. d Serial sections of human HCC tissue samples were subjected to IHC staining with antibodies against EFTUD2 & pSTAT3. Representative IHC images were showed in the left panel, & the right panel showed the correlation between EFTUD2 & pSTAT3 expression, in 50 human HCC tissue samples. Scale bars, 100 μ m. e The expression of EFTUD2, vimentin, Twist1, E-cadherin, STAT3, pSTAT3, MCL-1, & GAPDH was detected by western blotting in the indicated cells. f Western blot analysis showing that the increases in pSTAT3 & vimentin expression were compromised & that the decrease in E-cadherin was reversed by SI3-201, a STAT3 inhibitor, in EFTUD2-overexpressing Hep G2 cells. g The Hep G2 cells with EFTUD2 overexpression were treated with 100 μ M SI3-201 & subjected to migration & invasion assays. Scale bars, 200 μ m. The data are presented as the mean \pm SD from triplicate independent experiments, **P < 0.01. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/33024090>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



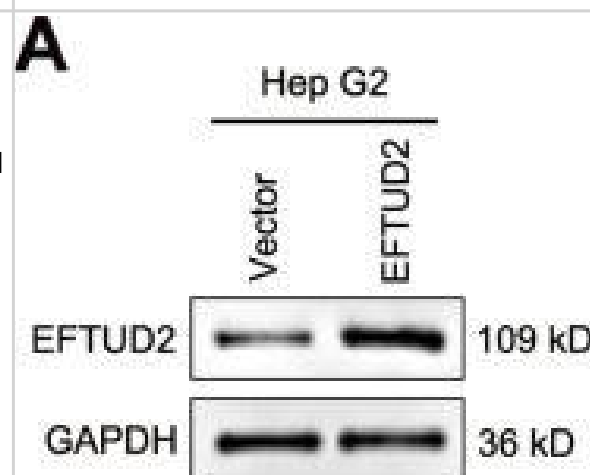
Western Blot: EFTUD2 Antibody [NB100-40849] - EFTUD2 promotes EMT via activation of the STAT3 pathway in HCC cells. a An M-A plot showed the genes differentially expressed between EFTUD2-overexpressing & control Hep G2 cells (N = 3), with the differentially regulated genes highlighted in red. b Gene sets of the IL6_JAK_STAT3 signaling pathway & the EMT were enriched in EFTUD2-overexpressing Hep G2 cells. c Serial sections of the xenograft tumors were subjected to IHC staining of EFTUD2, pSTAT3, E-cadherin & vimentin. Scale bars, 100 μ m. d Serial sections of human HCC tissue samples were subjected to IHC staining with antibodies against EFTUD2 & pSTAT3. Representative IHC images were showed in the left panel, & the right panel showed the correlation between EFTUD2 & pSTAT3 expression, in 50 human HCC tissue samples. Scale bars, 100 μ m. e The expression of EFTUD2, vimentin, Twist1, E-cadherin, STAT3, pSTAT3, MCL-1, & GAPDH was detected by western blotting in the indicated cells. f Western blot analysis showing that the increases in pSTAT3 & vimentin expression were compromised & that the decrease in E-cadherin was reversed by SI3-201, a STAT3 inhibitor, in EFTUD2-overexpressing Hep G2 cells. g The Hep G2 cells with EFTUD2 overexpression were treated with 100 μ M SI3-201 & subjected to migration & invasion assays. Scale bars, 200 μ m. The data are presented as the mean \pm SD from triplicate independent experiments, **P < 0.01. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/33024090>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: EFTUD2 Antibody [NB100-40849] - Depletion of EFTUD2 blocks cell cycle progression & promotes cell apoptosis. a EdU incorporation assays were used to identify the cells in S phase after EFTUD2 silencing in the indicated cells. Red: cell in S phase. Scale bars, 200 μ m. b The cell cycle analyses were performed in Hep3B & Huh7 cells with EFTUD2 knockdown. c, d Fluorescence microscopy & flow cytometry were performed to capture early apoptotic cells by mitochondrial membrane potential changes in Hep3B & Huh7 cells with EFTUD2 knockdown. Red, JC-1 aggregates; green, JC-1 monomers. Scale bars, 10 μ m. e, f EFTUD2-silenced Hep3B & Huh7 cells treated with or without CDDP (2 μ g/mL; 48 h) were stained with a combination of Annexin V-FITC & PI & analyzed by FACS. Cells positive for FITC staining were counted as apoptotic cells. The bar graphs show the percentage of apoptotic cells. g Apoptosis-associated proteins of the indicated cells were measured by western blotting. The data are presented as the means \pm SD. *P < 0.05; **P < 0.01; ***P < 0.001. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/33024090>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: EFTUD2 Antibody [NB100-40849] - EFTUD2 promotes HCC growth. a Western blot analysis of EFTUD2 protein expression in Hep G2 cells infected with the EFTUD2 overexpression lentivirus or the vector lentivirus. b, c The effect of EFTUD2 overexpression on cell proliferation was detected by CCK8 assays & colony formation assays. d EdU incorporation assays were used to identify the cells in S phase. e The distribution of different cell cycle phases in the indicated cells. f Tumor volumes were measured & recorded every 3 days, & a growth curve was plotted. g Subcutaneous xenograft tumors of the indicated cells. The right panel shows the wet weights of the xenograft tumors. h Representative images of H&E & IHC staining of EFTUD2 & Ki67 in the xenograft tumors. Scale bars, 100 μ m. The data are presented as the means \pm SD. *P < 0.05; **P < 0.01; ***P < 0.001; NS no significance. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/33024090>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Tu, M, He, L Et al. EFTUD2 maintains the survival of tumor cells and promotes hepatocellular carcinoma progression via the activation of STAT3. Cell Death Dis 2020-10-06 [PMID: 33024090] (ICC/IF, Human)

Zumer K, Plemenitas A, Saksela K et al. Patient mutation in AIRE disrupts P-TEFb binding and target gene transcription. Nucleic Acids Res 2011-10-01 [PMID: 21724609]



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NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
H00009343-P01-10ug	Recombinant Human EFTUD2 GST (N-Term) Protein

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This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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