

P8 / NUPR1 Antibody (N-Term)

Peptide-affinity purified goat antibody Catalog # AF2397a

Specification

P8 / NUPR1 Antibody (N-Term) - Product Information

Application

Primary Accession <u>060356</u>

Other Accession <u>NP_001035948.1</u>, <u>NP_036517</u>, <u>26471</u>

Predicted Human
Host Goat
Clonality Polyclonal
Concentration 0.5 mg/ml

Isotype IgG Calculated MW 8873

P8 / NUPR1 Antibody (N-Term) - Additional Information

Gene ID 26471

Other Names

Nuclear protein 1, Candidate of metastasis 1, Protein p8, NUPR1, COM1

Dilution

E~~N/A

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

P8 / NUPR1 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

P8 / NUPR1 Antibody (N-Term) - Protein Information

Name NUPR1 (HGNC:29990)

Synonyms COM1

Function

Transcription regulator that converts stress signals into a program of gene expression that empowers cells with resistance to the stress induced by a change in their microenvironment. Thereby participates in the regulation of many processes namely cell-cycle, apoptosis, autophagy



and DNA repair responses (PubMed: 11056169, PubMed:11940591, PubMed:16300740, PubMed:16478804, PubMed:18690848, PubMed:19650074, PubMed:19723804, PubMed:20181828, PubMed:22565310, PubMed:22858377, PubMed:30451898). Controls cell cycle progression and protects cells from genotoxic stress induced by doxorubicin through the complex formation with TP53 and EP300 that binds CDKN1A promoter leading to transcriptional induction of CDKN1A (PubMed: 18690848). Protects pancreatic cancer cells from stress-induced cell death by binding the RELB promoter and activating its transcription, leading to IER3 transactivation (PubMed: 22565310). Negatively regulates apoptosis through interaction with PTMA (PubMed: 16478804). Inhibits autophagy- induced apoptosis in cardiac cells through FOXO3 interaction, inducing cytoplasmic translocation of FOXO3 thereby preventing the FOXO3 association with the pro-autophagic BNIP3 promoter (PubMed:20181828). Inhibits cell growth and facilitates programmed cell death by apoptosis after adriamycin-induced DNA damage through transactivation of TP53 (By similarity). Regulates methamphetamine-induced apoptosis and autophagy through DDIT3-mediated endoplasmic reticulum stress pathway (By similarity). Participates in DNA repair following gamma-irradiation by facilitating DNA access of the transcription machinery through interaction with MSL1 leading to inhibition of histone H4' Lys-16' acetylation (H4K16ac) (PubMed: 19650074). Coactivator of PAX2 transcription factor activity, both by recruiting EP300 to increase PAX2 transcription factor activity and by binding PAXIP1 to suppress PAXIP1-induced inhibition on PAX2 (PubMed:11940591). Positively regulates cell cycle progression through interaction with COPS5 inducing cytoplasmic translocation of CDKN1B leading to the CDKN1B degradation (PubMed: 16300740). Coordinates, through its interaction with EP300, the assiociation of MYOD1, EP300 and DDX5 to the MYOG promoter, leading to inhibition of cell-cycle progression and myogenic differentiation promotion (PubMed:19723804). Negatively regulates beta cell proliferation via inhibition of cell-cycle regulatory genes expression through the suppression of their promoter activities (By similarity). Also required for LHB expression and ovarian maturation (By similarity). Exacerbates CNS inflammation and demyelination upon cuprizone treatment (By similarity).

Cellular Location

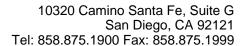
Nucleus. Cytoplasm Cytoplasm, perinuclear region

Tissue Location

Widely expressed, with high levels in liver, pancreas, prostate, ovary, colon, thyroid, spinal cord, trachea and adrenal gland, moderate levels in heart, placenta, lung, skeletal muscle, kidney, testis, small intestine, stomach and lymph node, and low levels in brain, spleen, thymus and bone marrow. Not detected in peripheral blood leukocytes.

P8 / NUPR1 Antibody (N-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.





• Western Blot

- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

P8 / NUPR1 Antibody (N-Term) - Images

P8 / NUPR1 Antibody (N-Term) - References

Cloning and expression of the human p8, a nuclear protein with mitogenic activity. Vasseur S, Vidal Mallo G, Fiedler F, Bodeker H, Canepa E, Moreno S, Iovanna JL. Eur J Biochem. 1999 Feb;259(3):670-5. PMID: 10092851