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Nkx2.1 Monoclonal Antibody (8G7G3/1)

Catalog Number MA5-16406

Product data sheet

Details

Size	500 µL
Host/Isotope	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	8G7G3/1
Immunogen	Rat TTF-1 recombinant protein.
Conjugate	Unconjugated
Form	Liquid
Storage Conditions	-20° C, Avoid Freeze/Thaw Cycles

Species Reactivity

Species reactivity	Human, Mouse, Rat
Published species	Human, Mouse, Not Applicable

Tested Applications	Dilution *
Flow Cytometry (Flow)	20 µg/10^6 cells
Immunohistochemistry (Frozen) (IHC (F))	1:50
Immunohistochemistry (Paraffin) (IHC (P))	1:50

Published Applications	
Western Blot (WB)	See 2 publications below
Miscellaneous PubMed (Misc)	See 1 publications below
Immunohistochemistry (IHC)	See 36 publications below
Immunohistochemistry (Paraffin) (IHC (P))	See 2 publications below
Immunocytochemistry (ICC/IF)	See 2 publications below
Gel Shift (GS)	See 1 publications below

* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.

Product specific information

Heat-mediated antigen retrieval is recommended prior to staining, using a 10mM citrate buffer, pH 6.0, for 10 minutes followed by cooling at room temperature for 20 min. Following antigen retrieval, incubate samples with primary antibody for 30 min at room temperature. A suggested positive control is normal thyroid or lung tissue.

Background/Target Information

This gene encodes a protein initially identified as a thyroid-specific transcription factor. The encoded protein binds to thyroglobulin promoter and regulates the expression of thyroid-specific genes but has also been shown to regulate the expression of genes involved in morphogenesis. Mutations and deletions in this gene are associated with benign hereditary chorea, choreoathetosis, congenital hypothyroidism, and neonatal respiratory distress, and may be associated with thyroid cancer. Multiple transcript variants encoding different isoforms have been found for this gene.

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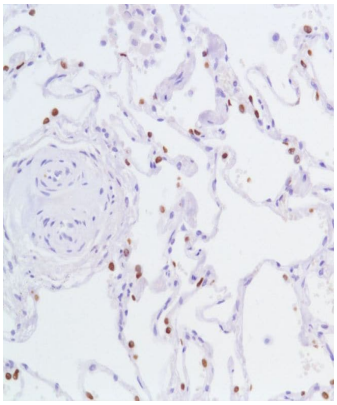
Product Images For Nkx2.1 Monoclonal Antibody (8G7G3/1)



Nkx2.1 Antibody (MA5-16406) in IHC

Immunohistochemical analysis of TTF-1 using anti-TTF-1 Monoclonal Antibody (Product # MA5-16406) in Lung Cancer Tissue. The recommened dilution for this antibody in immunohistochemistry applications is 1:50.

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PubMed References For Nkx2.1 Monoclonal Antibody (8G7G3/1)

2 Western Blot References

Species / Dilution	Summary
Mouse / Not Cited	MA5-16406 was used in western blot to study transcriptional networks regulated by the Nkx2-1 transcription factor in lung development and tumors PloS one (2012; 7:) **"Genome-wide analyses of Nkx2-1 binding to transcriptional target genes uncover novel regulatory patterns conserved in lung development and tumors."** Author(s):Tagne JB,Gupta S,Gower AC,Shen SS,Varma S,Lakshminarayanan M,Cao Y,Spira A,Volkert TL,Ramirez MI PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0029907
Human / Not Cited	MA516406 was used in western blot to identify interacting proteins of TTF-1 and their role in lung adenocarcinoma cell survival. Oncogene (2017; 36: 3740) **"TTF-1/NKX2-1 binds to DDB1 and confers replication stress resistance to lung adenocarcinomas."** Author(s):Liu Z,Yanagisawa K,Griesing S,Iwai M,Kano K,Hotta N,Kajino T,Suzuki M,Takahashi T PubMed Article URL:http://dx.doi.org/10.1038/onc.2016.524

1 Miscellaneous PubMed References

Species / Dilution	Summary
Human / Not Cited	MA5-16406 was used in immunohistochemistry to report a case of multiple cysts arising in both lobes of the thyroid gland, thymus, and right parotid gland Medicine (2015; 94:) **"Branchial Cleft-Like Cysts Involving 3 Different Organs: Thyroid Gland, Thymus, and Parotid Gland."** Author(s):Nakazawa T,Kondo T,Oishi N,Tahara I,Kasai K,Inoue T,Mochizuki K,Katoh R PubMed Article URL:http://dx.doi.org/10.1097/MD.0000000000001758

36 Immunohistochemistry References

Species / Dilution	Summary
Human / 1:20	MA5-16406 was used in immunohistochemistry to study OCT3/4 isoform A/B/B1 expression in solid (germ cell) tumours and cell lines British journal of cancer (2011; 105: 854) **"Specific detection of OCT3/4 isoform A/B/B1 expression in solid (germ cell) tumours and cell lines: confirmation of OCT3/4 specificity for germ cell tumours."** Author(s):Rijlaarsdam MA,van Herk HA,Gillis AJ,Stoop H,Jenster G,Martens J,van Leenders GJ,Dinjens W,Hoogland AM,Timmermans M,Looijenga LH PubMed Article URL:http://dx.doi.org/10.1038/bjc.2011.270
Human / Not Cited	MA5-16406 was used in immunohistochemistry to study the expression of the CDX-2 homeobox gene product in neuroendocrine tumors The American journal of surgical pathology (2004; 28: 1169) **"CDX-2 homeobox gene product expression in neuroendocrine tumors: its role as a marker of intestinal neuroendocrine tumors."** Author(s):Barbareschi M,Roldo C,Zamboni G,Capelli P,Cavazza A,Macri E,Cangi MG,Chilosi M,Doglioni C PubMed Article URL:http://dx.doi.org/10.1097/01.pas.0000131531.75602.b9
Human / 1:20	MA5-16406 was used in immunohistochemistry to report on a case of primary small cell neuroendocrine carcinoma of the kidney Endocrine pathology (2009; 20: 24) **"Primary small cell neuroendocrine carcinoma of the kidney: morphological, immunohistochemical, ultrastructural, and cytogenetic study of a case and review of the literature."** Author(s):La Rosa S,Bernasconi B,Micello D,Finzi G,Capella C PubMed Article URL:http://dx.doi.org/10.1007/s12022-008-9054-y
Human / 1:200	MA5-16406 was used in immunohistochemistry to establish the optimal panel of immunochemical markers for distinguishing metastatic mammary carcinoma from primary lung carcinoma Applied immunohistochemistry & molecular morphology : AIMM (2014; 22: 266) **"In search of the ideal immunopanel to distinguish metastatic mammary carcinoma from primary lung carcinoma: a tissue microarray study of 207 cases."** Author(s):Kawaguchi KR,Lu FI,Kaplan R,Liu YF,Chadwick P,Chen Z,Brogi E,Shin SJ PubMed Article URL:http://dx.doi.org/10.1097/PAI.0b013e318297cc0b

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	MA5-16406 was used in immunohistochemistry to study a spectrum of pulmonary mucinous cystic neoplasia cases
Human / 1:100	American journal of clinical pathology (2005; 124: 62) **"The spectrum of pulmonary mucinous cystic neoplasia : a clinicopathologic and immunohistochemical study of ten cases and review of literature."** Author(s):Gao ZH,Urbanski SJ PubMed Article URL:http://dx.doi.org/10.1309/52XXR6E6U0J2JX0F
Human / 1:50	MA5-16406 was used in immunohistochemistry to study the utility of an immunohistochemical panel in subtyping non-small cell lung carcinomas lacking morphologic differentiation The American journal of surgical pathology (2011; 35: 15) **"Subclassification of non-small cell lung carcinomas lacking morphologic differentiation on biopsy specimens: Utility of an immunohistochemical panel containing TTF-1, napsin A, p63, and CK5/6."** Author(s):Mukhopadhyay S,Katzenstein AL PubMed Article URL:http://dx.doi.org/10.1097/PAS.0b013e3182036d05
Mouse / Not Cited	MA5-16406 was used in immunohistochemistry to study the presence of a multipotent ventral foregut organ progenitor in mouse pancreatic buds PloS one (2013; 7:) **"A fate map of the murine pancreas buds reveals a multipotent ventral foregut organ progenitor."** Author(s):Angelo JR,Guerrero-Zayas MI,Tremblay KD PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0040707
Human / 1:100	MA5-16406 was used in immunohistochemistry to report on 51 cases of neuroendocrine carcinoma of the stomach The American journal of surgical pathology (2013; 37: 949) **"Neuroendocrine carcinoma of the stomach: morphologic and immunohistochemical characteristics and prognosis."** Author(s):Ishida M,Sekine S,Fukagawa T,Ohashi M,Morita S,Taniguchi H,Katai H,Tsuda H,Kushima R PubMed Article URL:http://dx.doi.org/10.1097/PAS.0b013e31828ff59d
Human / 1:80	MA5-16406 was used in immunohistochemistry to report on a case of primary neuroendocrine carcinoma of the breast Tumori (2007; 93: 496) **"Primary neuroendocrine carcinoma of the breast: a case report."** Author(s):Yaren A,Kelten C,Akbulut M,Teke Z,Duzcan E,Erdem E PubMed Article URL:http://dx.doi.org/10.1177/030089160709300516
Human / 1:50	MA5-16406 was used in immunohistochemistry to evaluate the quality of pulmonary adenocarcinoma CT-guided trans-thoracic needle biopsies in the context of the 2011 ATS/ERS/IASLC guidelines Lung cancer (Amsterdam, Netherlands) (2013; 82: 69) **"Adequacy of CT-guided biopsies with histomolecular subtyping of pulmonary adenocarcinomas: influence of ATS/ERS/IASLC guidelines."** Author(s):Ferretti GR,Busser B,de Fraipont F,Reymond E,McLeer-Florin A,Mescam-Mancini L,Moro-Sibilot D,Brambilla E,Lantuejoul S PubMed Article URL:http://dx.doi.org/10.1016/j.lungcan.2013.07.010
Mouse / Not Cited	MA5-16406 was used in immunohistochemistry to develop a transgenic mouse model of pulmonary adenocarcinoma The Journal of pathology (2001; 195: 482) **"A model of pulmonary adenocarcinoma in transgenic mice expressing the simian virus 40 T antigen driven by the rat Calbindin-D9K (CaBP9K) promoter."** Author(s):Chailley-Heu B,Rambaud C,Barlier-Mur AM,Galateau-Salle F,Perret C,Capron F,Lacaze-Masmonteil T PubMed Article URL:http://dx.doi.org/10.1002/path.960
Human / 1:50	MA5-16406 was used in immunohistochemistry to report on a case of miliary brain metastases from occult lung adenocarcinoma Journal of neurosciences in rural practice (2012; 3: 386) **"Miliary brain metastases from occult lung adenocarcinoma: Radiologic and histopathologic confirmation."** Author(s):Kahveci R,Gürer B,Kaygusuz G,Sekerci Z PubMed Article URL:http://dx.doi.org/10.4103/0976-3147.102638
Human / 1:1000	MA5-16406 was used in immunohistochemistry to report on a case of combined small-cell carcinoma of the lung Virchows Archiv : an international journal of pathology (2011; 458: 497) **"Combined small-cell carcinoma of the lung with quadripartite differentiation of epithelial, neuroendocrine, skeletal muscle, and myofibroblastic type."** Author(s):Pelosi G,Sonzogni A,Galetta D,Perrone F,Braidotti P,Manzotti M,Fabbri A,Spaggiari L,Veronesi G,Viale G PubMed Article URL:http://dx.doi.org/10.1007/s00428-010-1011-8

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	MA5-16406 was used in immunohistochemistry to report on a patient with large pulmonary meningothelial-like nodules
Human / 1:100	Case reports in oncology (2012; 5: 471) **"Is primary pulmonary meningioma a giant form of a meningothelial-like nodule? A case report and review of the literature."** Author(s):Masago K,Hosada W,Sasaki E,Murakami Y,Sugano M,Nagasaka T,Yamada M,Yatabe Y PubMed Article URL:http://dx.doi.org/10.1159/000342391
	MA5-16406 was used in immunohistochemistry to develop a prognostic model of non-small cell lung cancer based on protein expression patterns
Human / 1:100	Surgery today (2007; 36: 1039) **"Prognostic model of stage II non-small cell lung cancer by a discriminant analysis of the immunohistochemical protein expression."** Author(s):Kohri T,Sugano M,Kawashima O,Saito R,Sakurai S,Sano T,Nakajima T PubMed Article URL:http://dx.doi.org/10.1007/s00595-006-3319-1
	MA5-16406 was used in immunohistochemistry to study the diagnostic value of TTF-1, CK 5/6, and p63 immunostaining in the classification of lung carcinomas
Human / 1:200	Applied immunohistochemistry & molecular morphology : AIMM (2007; 15: 415) **"The diagnostic value of TTF-1, CK 5/6, and p63 immunostaining in classification of lung carcinomas."** Author(s):Kargi A,Gurel D,Tuna B PubMed Article URL:http://dx.doi.org/10.1097/PAI.0b013e31802fab75
	MA5-16406 was used in immunohistochemistry to study the role of distinct mRNAs in the cell type-specific occurrence of caveolin-1alpha and -1beta in the lung
Mouse / 1:100	The Journal of biological chemistry (2004; 279: 25574) **"Cell type-specific occurrence of caveolin-1alpha and -1beta in the lung caused by expression of distinct mRNAs."** Author(s):Kogo H,Aiba T,Fujimoto T PubMed Article URL:http://dx.doi.org/10.1074/jbc.M310807200
	MA5-16406 was used in immunohistochemistry to study the association of placental transmogrification of the the lung with pulmonary fibrochondromatous hamartoma
Human / 1:100	Archives of pathology & laboratory medicine (2002; 126: 562) **"Placental transmogrification of the lung is a histologic pattern frequently associated with pulmonary fibrochondromatous hamartoma."** Author(s):Xu R,Murray M,Jagirdar J,Delgado Y,Melamed J PubMed Article URL:http://dx.doi.org/10.5858/2002-126-0562-PTOTLI
	MA5-16406 was used in immunohistochemistry to study the immunohistopathology of mixed subtypes of adenocarcinoma of the lung
Human / 1:100	Pathology international (2007; 57: 765) **"Immunohistopathological re-evaluation of adenocarcinoma of the lung with mixed subtypes using a tissue microarray technique and hierarchical clustering analysis."** Author(s):Gamal G,Sano T,Sakurai S,Kawashima O,Sugano M,Nakajima T PubMed Article URL:http://dx.doi.org/10.1111/j.1440-1827.2007.02172.x
	MA5-16406 was used in immunohistochemistry to study thyroid transcription factor 1 expression in cystic lesions of the neck
Human / 1:50	Virchows Archiv : an international journal of pathology (2005; 447: 9) **"Thyroid transcription factor 1 expression in cystic lesions of the neck: an immunohistochemical investigation of thyroglossal duct cysts, branchial cleft cysts and metastatic papillary thyroid cancer."** Author(s):Kreft A,Hansen T,Kirkpatrick CJ PubMed Article URL:http://dx.doi.org/10.1007/s00428-005-1227-1
	MA5-16406 was used in immunohistochemistry to report on a patient with pulmonary adenocarcinoma with a micropapillary component
Human / 1:100	APMIS : acta pathologica, microbiologica, et immunologica Scandinavica (2005; 113: 550) **"Pulmonary adenocarcinoma with micropapillary component: an immunohistochemical study. Case report."** Author(s):Kuroda N,Hamauzu T,Toi M,Yamaoka K,Miyazaki E,Hiroi M,Nakata H,Taguchi H,Enzan H PubMed Article URL:http://dx.doi.org/10.1111/j.1600-0463.2005.apm_151.x
	MA5-16406 was used in immunohistochemistry to study the diagnostic value of Pax8 and TTF-2 in thyroid epithelial neoplasms
Human / Not Cited	Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc (2008; 21: 192) **"Diagnostic utility of thyroid transcription factors Pax8 and TTF-2 (FoxE1) in thyroid epithelial neoplasms."** Author(s):Nonaka D,Tang Y,Chiriboga L,Rivera M,Ghossein R PubMed Article URL:http://dx.doi.org/10.1038/modpathol.3801002

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Human / 1:50	MA5-16406 was used in immunohistochemistry to study the value of the immunohistochemical expression of vimentin for predicting non-small cell lung carcinoma metastasis Lung cancer (Amsterdam, Netherlands) (2013; 81: 117) **"Vimentin expression predicts the occurrence of metastases in non small cell lung carcinomas."** Author(s):Dauphin M,Barbe C,Lemaire S,Nawrocki-Raby B,Lagonotte E,Delepine G,Birembaut P,Gilles C,Polette M PubMed Article URL:http://dx.doi.org/10.1016/j.lungcan.2013.03.011
Human / 1:400	MA5-16406 was used in immunohistochemistry to study the histology of papillary adenocarcinoma of the lung Pathology international (2005; 55: 619) **"Papillary adenocarcinoma of the lung is a more advanced adenocarcinoma than bronchioloalveolar carcinoma that is composed of two distinct histological subtypes."** Author(s):Jian Z,Tomizawa Y,Yanagitani N,Iijima H,Sano T,Nakajima T PubMed Article URL:http://dx.doi.org/10.1111/j.1440-1827.2005.01879.x
Mouse / Not Cited	MA5-16406 was used in immunohistochemistry to study the role of beta-catenin signaling in the formation and differentiation of multiple mesenchymal lineages during lung development PloS one (2008; 3:) **"Formation and differentiation of multiple mesenchymal lineages during lung development is regulated by beta-catenin signaling."** Author(s):De Langhe SP,Carraro G,Tefft D,Li C,Xu X,Chai Y,Minoo P,Hajihosseini MK,Drouin J,Kaartinen V,Bellusci S PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0001516
Mouse / Not Cited	MA5-16406 was used in immunohistochemistry to study the role of the transcription factor C/EBPalpha in lung development and its potential role in COPD The European respiratory journal (2010; 35: 186) **"Lung-specific inactivation of CCAAT/enhancer binding protein alpha causes a pathological pattern characteristic of COPD."** Author(s):Didon L,Roos AB,Elmberger GP,Gonzalez FJ,Nord M PubMed Article URL:http://dx.doi.org/10.1183/09031936.00185008
Human / 1:50	MA5-16406 was used in immunohistochemistry to study the association of elevated phospho-S6 levels with metastasis in adenocarcinoma of the lung Clinical cancer research : an official journal of the American Association for Cancer Research (2008; 14: 7832) **"Elevated phospho-S6 expression is associated with metastasis in adenocarcinoma of the lung."** Author(s):McDonald JM,Pelloski CE,Ledoux A,Sun M,Raso G,Komaki R,Wistuba II,Bekele BN,Aldape K PubMed Article URL:http://dx.doi.org/10.1158/1078-0432.CCR-08-0565
Human / Not Cited	MA5-16406 was used in immunohistochemistry to study the correlation between fluorodeoxyglucose uptake and thyroid transcription factor-1 expression and the prognostic value in non-small cell lung cancer Anticancer research (2014; 34: 2467) **"Influence of thyroid transcription factor-1 on fluorodeoxyglucose uptake and prognosis of non-small cell lung cancer."** Author(s):Ooi H,Chen CY,Hsiao YC,Huang WS,Hsieh BT PubMed Article URL:http://www.ncbi.nlm.nih.gov/pubmed/24778062
Human / 1:50	MA5-16406 was used in immunohistochemistry to report on a case of extraosseous benign notochordal cell tumor Human pathology (2013; 44: 1447) **"Extraosseous benign notochordal cell tumor presenting as bilateral pulmonary nodules."** Author(s):Lee FY,Wen MC,Wang J PubMed Article URL:http://dx.doi.org/10.1016/j.humpath.2012.10.028
Human / 1:50	MA5-16406 was used in immunohistochemistry to perform a comparative study of the value of napsin A and thyroid transcription factor-1 for identifying a pulmonary origin of metastic adenocarcinomas American journal of clinical pathology (2012; 138: 703) **"Comparison of monoclonal napsin A, polyclonal napsin A, and TTF-1 for determining lung origin in metastatic adenocarcinomas."** Author(s):Mukhopadhyay S,Katzenstein AL PubMed Article URL:http://dx.doi.org/10.1309/AJCPKVBXTI9O3TEM
Human / Not Cited	MA5-16406 was used in immunohistochemistry to study the immunohistochemical expression of TTF1 in normal lung neuroendocrine cells and related tumors using two different monoclonal antibodies Virchows Archiv : an international journal of pathology (2010; 457: 497) **"TTF1 expression in normal lung neuroendocrine cells and related tumors: immunohistochemical study comparing two different monoclonal antibodies."** Author(s):La Rosa S,Chiaravalli AM,Placidi C,Papanikolaou N,Cerati M,Capella C PubMed Article URL:http://dx.doi.org/10.1007/s00428-010-0954-0

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	MA5-16406 was used in immunohistochemistry to study MASH1 as a marker to differentiate pulmonary small cell carcinoma from Merkel cell carcinoma
Human / 1:2.000	Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc (2008; 21: 1357) **"MASH1: a useful marker in differentiating pulmonary small cell carcinoma from Merkel cell carcinoma."** Author(s):Ralston J,Chiriboga L,Nonaka D PubMed Article URL:http://dx.doi.org/10.1038/modpathol.2008.118
	MA5-16406 was used in immunohistochemistry to evaluate the detection of ROS1 transpositions in lung adenocarcinomas using a testing alogorithm
Human / Not Cited	Lung cancer (Amsterdam, Netherlands) (2014; 83: 168) **"On the relevance of a testing algorithm for the detection of ROS1-rearranged lung adenocarcinomas."** Author(s):Mescam-Mancini L,Lantuéjoul S,Moro-Sibilot D,Rouquette I,Souquet PJ,Audigier-Valette C,Sabourin JC, Decroisette C,Sakhri L,Brambilla E,McLeer-Florin A PubMed Article URL:http://dx.doi.org/10.1016/j.lungcan.2013.11.019
	MA5-16406 was used in immunohistochemistry to study the diagnostic value of TTF-1 and surfactant-B in lung adenocarcinoma and pleural mesothelioma
Human / 1:50	Annals of diagnostic pathology (2004; 8: 337) **"TTF-1 and surfactant-B as co-adjuvants in the diagnosis of lung adenocarcinoma and pleural mesothelioma."** Author(s):Bakir K,Koçer NE,Deniz H,Güldür ME PubMed Article URL:http://dx.doi.org/10.1053/j.anndiagpath.2004.08.003
	MA5-16406 was used in immunohistochemistry to report on 17 cases of high-grade lung adenocarcinoma with a fetal lung-like morphology
Human / 1:200	The American journal of surgical pathology (2013; 37: 924) **"High-grade lung adenocarcinoma with fetal lung-like morphology: clinicopathologic, immunohistochemical, and molecular analyses of 17 cases."** Author(s):Morita S,Yoshida A,Goto A,Ota S,Tsuta K,Yokozawa K,Asamura H,Nakajima J,Takai D,Mori M,Oka T,Tamaru J, Itoyama S,Furuta K,Fukayama M,Tsuda H PubMed Article URL:http://dx.doi.org/10.1097/PAS.0b013e31827e1e83
	MA5-16406 was used in immunohistochemistry to study the role of aldoketo reductase1B10 in the development of lung cancer
Human / 1:200	Pathology, research and practice (2008; 204: 295) **"AKR1B10 in usual interstitial pneumonia: expression in squamous metaplasia in association with smoking and lung cancer."** Author(s):Li CP,Goto A,Watanabe A,Murata K,Ota S,Niki T,Aburatani H,Fukayama M PubMed Article URL:http://dx.doi.org/10.1016/j.prp.2006.12.012

2 Immunohistochemistry (Paraffin) References

Species / Dilution	Summary
	MA5-16406 was used in immunohistochemistry - paraffin section to examine the effect of thyroid transcription factor-1 expression on ipsilateral mediastinal nodal metastases in primary lung adenocarcinoma
Not Applicable / Not Cited	Contemporary oncology (Poznan, Poland) (2013; 16: 516) **"The effect of TTF-1 expression on ipsilateral mediastinal nodal (N2) metastases in primary adenocarcinoma of the lung."** Author(s):Samancilar O,Kaya SO,Ceylan KC,Usluer O,Yener AG PubMed Article URL:http://dx.doi.org/10.5114/wo.2012.32484
	MA5-16406 was used in immunohistochemistry - paraffin section to assess lung emphysema and predisposition due to extracellular matrix defects in aneurysmal Fibulin-4 mice
Not Applicable / 1:250	PloS one (2015; 9:) **"Extracellular matrix defects in aneurysmal Fibulin-4 mice predispose to lung emphysema."** Author(s):Ramnath NW,van de Luijtgaarden KM,van der Pluijm I,van Nimwegen M,van Heijningen PM,Swagemakers SM, van Thiel BS,Ridwan RY,van Vliet N,Vermeij M,Hawinkels LJ,de Munck A,Dzyubachyk O,Meijering E,van der Spek P, Rottier R,Yanagisawa H,Hendriks RW,Kanaar R,Rouwet EV,Kleinjan A,Essers J PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0106054

2 Immunocytochemistry References

Species / Dilution	Summary

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	MA5-16406 was used in immunocytochemistry and immunohistochemistry - paraffin section to report that mouse embryonic stem cells can be used to generate functional thyroid tissue.
Mouse / 1:3,000	Nature (2012; 491: 66) **"Generation of functional thyroid from embryonic stem cells."** Author(s):Antonica F,Kasprzyk DF,Opitz R,Iacovino M,Liao XH,Dumitrescu AM,Refetoff S,Peremans K,Manto M,Kyba M, Costagliola S PubMed Article URL:http://dx.doi.org/10.1038/nature11525
	MA5-16406 was used in immunocytochemistry to study the expression of thyroid transcription factor-1 in 16 human lung cancer cell lines
Human / Not Cited	Lung cancer (Amsterdam, Netherlands) (2003; 39: 31) **"Expression of thyroid transcription factor-1 in 16 human lung cancer cell lines."** Author(s):Fujita J,Ohtsuki Y,Bandoh S,Ueda Y,Kubo A,Tojo Y,Yamaji Y,Ishida T PubMed Article URL:http://dx.doi.org/10.1016/s0169-5002(02)00390-2

1 Gel Shift References

Species / Dilution	Summary
	MA5-16406 was used in EMSA to study the regulation of WNT7b by TTF-1, GATA6, and Foxa2 in lung epithelium
Mouse / Not Cited	The Journal of biological chemistry (2002; 277: 21061) **"The WNT7b promoter is regulated by TTF-1, GATA6, and Foxa2 in lung epithelium."** Author(s):Weidenfeld J,Shu W,Zhang L,Millar SE,Morrisey EE PubMed Article URL:http://dx.doi.org/10.1074/jbc.M111702200

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