#### For Research Use Only

# TTF1/NKX2-1 Monoclonal antibody

Catalog Number:66034-1-lg 6 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 66034-1-lg NM\_003317 GeneID (NCBI): Concentration: 1000 ug/ml 7080 **UNIPROT ID:** Source: Mouse P43699 Full Name: Isotype: IgG3 NK2 homeobox 1

> Calculated MW: 42 kDa Observed MW: 41 kDa

Purification Method: Protein A purification

CloneNo.: 2C8F3

Recommended Dilutions: WB: 1:1000-1:8000 IHC: 1:50-1:500 IF-P: 1:200-1:800

**Applications** 

Tested Applications: WB, IHC, IF-P, ELISA Cited Applications: WB, IHC, IF Species Specificity: human, pig Cited Species:

human

IHC: human thyroid cancer tissue, human lung cancer tissue

Positive Controls:

WB: HepG2 cells,

IF-P: human lung cancer tissue,

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

# **Background Information**

Homeobox protein Nkx-2.1 (NKX2-1), also named Thyroid nuclear factor 1, Thyroid transcription factor 1 (TTF1). It is a transcription factor that binds and activates the promoter of thyroid specific genes such as thyroglobulin, thyroperoxidase, and thyrotropin receptor. Crucial in the maintenance of the thyroid differentiation phenotype. May play a role in lung development and surfactant homeostasis. Defects in NKX2-1 are the cause of benign hereditary chorea (BHC), choreoathetosis, hypothyroidism, and neonatal respiratory distress (CHNRD).

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Kun Wang	35415320	ACS Omega	WB
Merve Özel	33689126	Cell Biochem Biophys	WB
Qingyang Ning	40203792	Int Immunopharmacol	IF

## Storage

Storage:

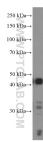
Store at -20°C. Stable for one year after shipment.

Storage Buffer

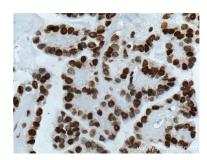
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

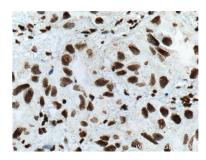
### **Selected Validation Data**



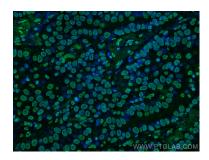
HepG2 cells were subjected to SDS PAGE followed by western blot with 66034-1-1g (TTF 1/NK)2-1 antibody at dilution of 1:4000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human thyroid cancer tissue slide using 66034-1-Ig (TTF1/NKX2-1 antibody at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 66034-1-1g (TTF1/NK/2-1 antibody at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed human lung cancer tissue using TTF1 antibody (66034-1-lg, Clone: 2C8F3) at dilution of 1:400 and CoraLite®488-Conjugated Affini Pure Goat Anti-Mouse IgG(H+L).