

## Rabbit Anti-TTF1/NKX2-1 antibody

SL0826R

**Product Name** TTF1/NKX2-1

**Chinese Name** 甲状腺核转录因子-1 抗体

**Alias** NKX21\_HUMAN; Homeobox protein Nkx-2.1; Homeobox protein NK-2 homolog A; Thyroid transcription factor 1; Thyroid transcription factor 1 (TTF-1); Thyroid-specific enhancer-binding protein (T/EBP); NKX2A; TITF1; TTF1; TTF-1; NK2 homeobox 1; BCH; BHC; NK-2; TEBP; NMTC1; T/EBP;

**Research Area** Tumour Cell biology transcriptional regulatory factor Epigenetics

**Immunogen Species** Rabbit

**Clonality** Polyclonal

**React Species** Human,Mouse,Rat

**Applications** WB=1:500-2000,IHC-P=1:100-500,Flow-Cyt=1 $\mu$ g/Test,IHC-F=1:100-500,IF=1:100-500,ICC/IF (Paraffin sections need antigen repair)  
not yet tested in other applications.  
optimal dilutions/concentrations should be determined by the end user.

**Theoretical molecular weight** 38kDa

**Cellular localization** The nucleus

**Form** Liquid

**Concentration** 1mg/ml

**immunogen** KLH conjugated synthetic peptide derived from human TTF-1: 201-300/372

**Lsotype** IgG

**Purification** affinity purified by Protein A

**Buffer Solution** 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

**Storage** Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

**Attention** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**PubMed** [PubMed](#)

This gene encodes a protein initially identified as a thyroid-specific transcription factor. The encoded protein binds to the 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. This gene shares the symbol/alias 'TFF1' with another gene, transcription termination factor 1, which plays a role in ribosomal gene transcription. [provided by RefSeq, Apr 2011]

**Function:**

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 differentiated phenotype. May play a role in lung development and surfactant homeostasis.

**Subcellular Location:**

Nucleus.

**Tissue Specificity:**

Thyroid and lung.

**Post-translational modifications:**

Phosphorylated on serine residues by STK3.

**DISEASE:**

Chorea, hereditary benign (BHC) [MIM:118700]: A rare autosomal dominant movement disorder characterized by early onset in childhood, a stable or non-progressive course of chorea, and no mental deterioration. Chorea is characterized by involuntary, forcible, rapid, jerky movements that may be subtle or ballistic, and may be confluent, markedly altering normal patterns of movement. Note=The disease is caused by mutations affecting the gene represented in this entry.

Choreoathetosis and congenital hypothyroidism with or without pulmonary dysfunction (CAHT) [MIM:610978]: An autosomal dominant disorder that manifests in infancy with neurological dysfunction, congenital hypothyroidism, and respiratory problems. It is characterized by movement abnormalities beginning with muscular hypotonia followed by the development of chorea, athetosis, dystonia, ataxia, and dyspraxia. {ECO:0000269|PubMed:11854318, Note=The disease is caused by mutations affecting the gene represented in this entry.

**Similarity:**

Belongs to the NK-2 homeobox family.

Contains 1 homeobox DNA-binding domain.

**SWISS:**

P43699

**Gene ID:**

**Product  
Detail**

7080

**Database links:**

[Entrez Gene: 7080](#) Human

[Entrez Gene: 21869](#) Mouse

[Entrez Gene: 25628](#) Rat

[Omim: 600635](#) Human

[SwissProt: P43699](#) Human

[SwissProt: P50220](#) Mouse

[SwissProt: P23441](#) Rat

[Unigene: 94367](#) Human

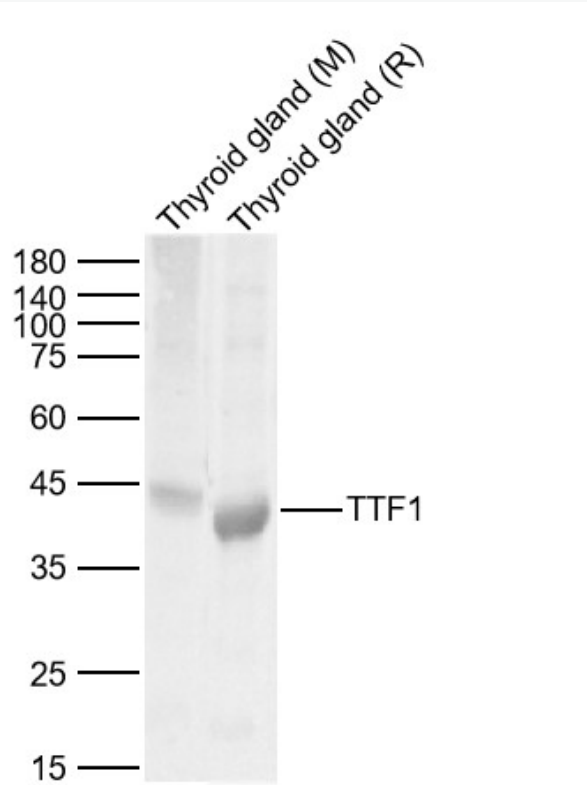
[Unigene: 89972](#) Mouse

[Unigene: 34265](#) Rat

同源结构域蛋白（Homeodomain Proteins）

TTF-1 存在于肺和大脑的一些区域内；包括垂体，甲状旁腺和甲状腺旁细胞中也有表达。TTF-1 有调节甲状腺、肺和大脑的基因表达的功能。它在甲状腺中的分子靶点是甲状腺球蛋白、甲状腺素受体和甲状腺过氧化酶。TTF1 在肺腺癌和肺神经内分泌 Tumour（包括有肺小细胞癌）是较好的标记物之一。其特异性和敏感性都很高，可以用于区分肺原发性、继发性腺癌、肠道腺癌等。

**Product  
Picture**



Sample:

Lane 1: Mouse Thyroid gland Lysates

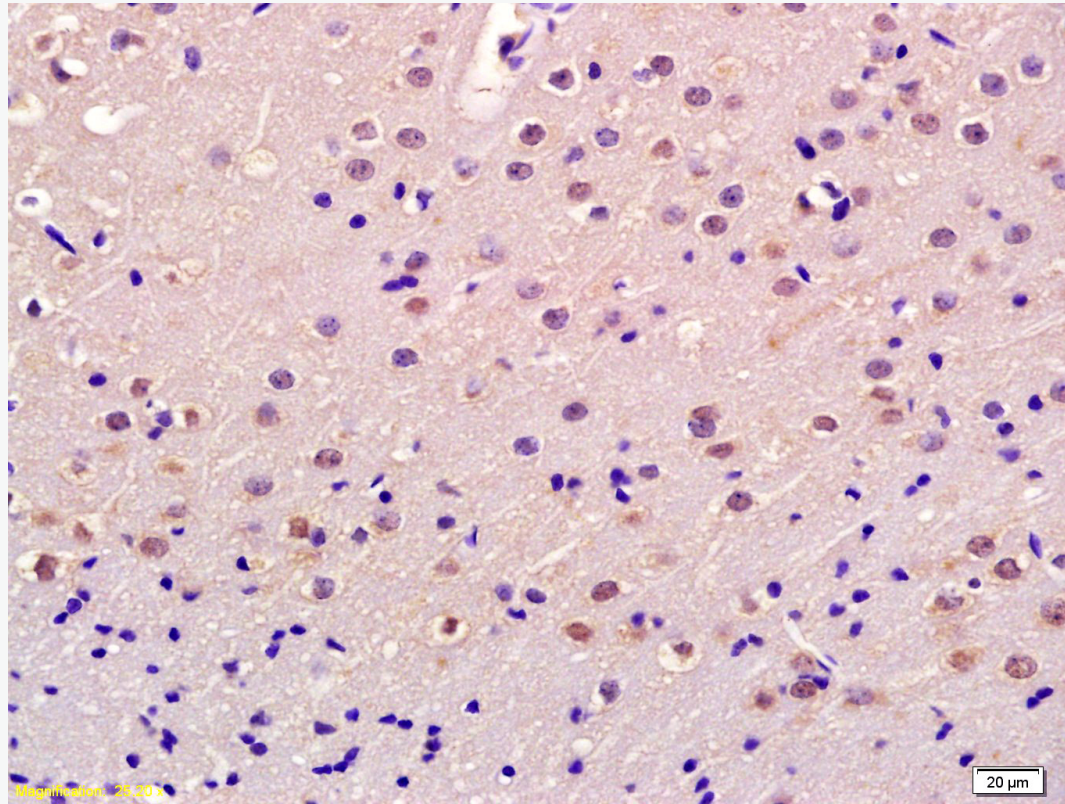
Lane 2: Rat Thyroid gland Lysates

Primary: Anti-TTF1 (SL0826R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 38kDa

Observed band size: 38kDa



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( 1M, pH 6.0 ), Boiling bathing for 15min; Block endogenous p  
by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for

Incubation: Anti-TTF1/NKX2.1 Polyclonal Antibody, Unconjugated(SL0826R) 1:200, overni

4℃, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining