

Rabbit Anti-TTF1/FITC Conjugated antibody

SL0826R-FITC

Product Name:	Anti-TTF1/FITC
Chinese Name:	FITC标记的甲状腺核转录因子-1抗体
Alias:	AV026640; BCH; Benign chorea; BHC; Homeobox protein NK 2 homolog A; Homeobox protein NK-2 homolog A; Homeobox protein Nkx 2.1; Homeobox protein Nkx2.1; Homeobox protein Nkx2.1; NK 2; NK 2 homolog A; NK2; NK2 homeobox 1; NK2, drosophila, homolog of, A; NK2.1, mouse, homolog of; Nkx 2 1; NKX 2.1; NKX 2A; NKX2 1; Nkx2-1; NKX2.1; NKX21_HUMAN; NKX2A; T EBP; T/EBP; TEBP; Thyroid nuclear factor 1; Thyroid nuclear factor; Thyroid specific enhancer binding protein; Thyroid transcription factor 1; Tin man; Tinman; TITF 1; TTF1; TTF-1; TTF1.
Organism Species:	
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	ICC=1:50-200IF=1:50-200 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	38kDa
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human TTF-1
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail:	background: 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 differentiation 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, defined 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 become 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 (CAHTP) [MIM:610978]: An autosomal dominant disorder that manifests in infancy with neurological disturbances, hypothyroidism, and respiratory problems. It is characterized by movement abnormalities beginning with muscular hypotonia followed by the development of chorea, athetosis, dystonia, ataxia, and dysarthria. {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.

Database links:

Entrez Gene: 7080Human

Entrez Gene: 21869 Mouse

Entrez Gene: 25628Rat

Omim: 600635Human

SwissProt: P43699Human

SwissProt: P50220Mouse

SwissProt: P23441Rat

<u>Unigene: 94367</u>Human

Unigene: 89972Mouse

Unigene: 34265Rat

Important Note:

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

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、促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)中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、小部分胃肠道腺癌等。