

## Product datasheet for **AP09633PU-N**

### FOX E1 (C-term) Goat Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IHC
Recommended Dilution:	<b>Peptide ELISA:</b> 1/8000 (Detection Limit). <b>Western blot:</b> Preliminary experiments gave an approx 70kDa band in Human Thymus and Thyroid Gland lysates after 0.3µg/ml antibody staining. Please note that currently we cannot find an explanation in the literature for the band we observe given the calculated size of 38.1kDa according to NP_004464.2. The 65kDa band was successfully blocked by incubation with the immunizing peptide. <b>Immunohistochemistry on Paraffin Sections:</b> 2-4 µg/ml. In paraffin embedded Human Testis this antibody shows strong nuclear staining in developing sperm cells. In paraffin embedded Human Thyroid Gland this antibody shows nuclear staining in thyrocytes.
Reactivity:	Human
Host:	Goat
Clonality:	Polyclonal
Immunogen:	Synthetic peptide C-AYPGGIDRFVSAM from the C-terminus of Human FOX E1 (NP_004464.2).
Specificity:	Recognizes FOX E1 / TTF2 at C-term.
Formulation:	Tris saline, pH~7.3 State: Aff - Purified State: Liquid purified Ig fraction. Stabilizer: 0.5% BSA Preservative: 0.02% Sodium Azide
Concentration:	lot specific
Purification:	Ammonium Sulphate Precipitation followed by antigen Affinity Chromatography using the immunizing peptide.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.



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**Stability:** Shelf life: one year from despatch.

**Gene Name:** forkhead box E1

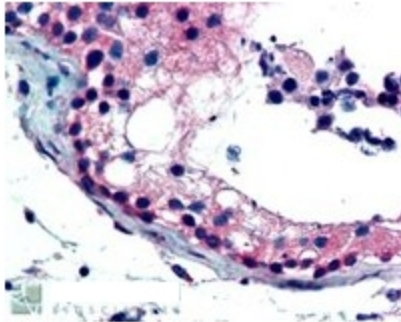
**Database Link:** [Entrez Gene 2304 Human O00358](#)

**Background:** Forkhead box protein E1 (FOXE1) is a member of the forkhead/ winged-helix domain transcription factor family. FOXE1, also designated FKHL15 or TTF-2, complexes with TTF-1 and Pax-8 to induce thyroid follicular cell differentiation and thyroid hormone biosynthesis by regulating the expression of the sodium iodide symporter (NIS), thyroid peroxidase (TPO), thyroglobulin (TG) and the thyrotropin receptor (TSHR). FOXE1 encodes a protein that is expressed in several tissues, including thymus, adult brain, lung, liver, heart and pancreas. The chromosomal location of the FOXE1 gene on 9q22 suggests that it may be involved in squamous cell epithelioma and hereditary sensory neuropathy type I. Mutations in the FOXE1 gene lead to the development of congenital hypothyroidism, which occurs in approximately one in four thousand newborns and results in complete or partial failure of thyroid gland development. Patients who are homozygous for a missense mutation in the forkhead domain of the FOXE1 gene can also develop thyroid agenesis, cleft palate and choanal atresia. Subsequently, the FOXE1 gene may be used as a marker to study these disorders.

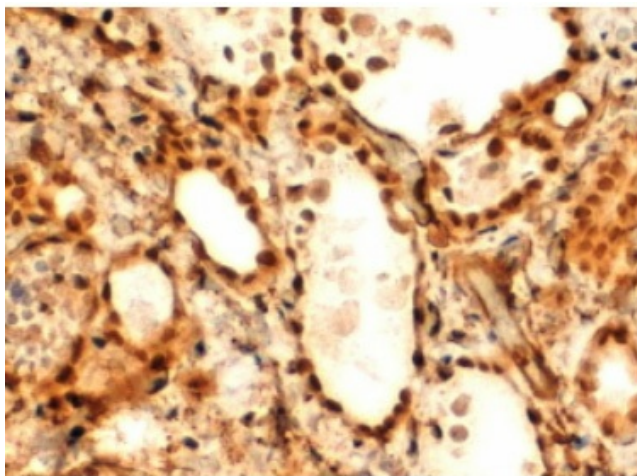
**Synonyms:** FOXE2, TITF2, TTF2, HFKL5, HFKH4, TTF-2

**Protein Families:** Druggable Genome, Transcription Factors

### Product images:



FOXE1 antibody staining of Paraffin Embedded Human Testis at 2.5ug/ml. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



FOX E1 antibody staining of Paraffin Embedded Human Thyroid Gland at 2 ug/ml. Steamed antigen retrieval with Tris/EDTA buffer pH 9, HRP-staining.