

**PAX8, 1-287aa Human, His tag, E.coli**

**Cat.NO.: TP03297**

3th Edition

**Synonyms:** Paired box protein Pax-8 isoform PAX8E, paired box 8

**Description:** Paired box protein Pax-8 isoform PAX8E, also known as PAX8, is expressed in the developing and adult thyroid, the developing secretory system and at lower levels, in the adult kidney. PAX8 complexes with TTF-1 and TTF-2 to induce thyroid follicular cell differentiation and thyroid hormone biosynthesis by regulating the expression of sodium iodide symporter (NIS), thyroid peroxidase (TPO), thyroglobulin (TG) and the thyrotropin receptor (TSHR). Defects in PAX8 are the cause of congenital hypothyroidism non-goitrous type 2 (CHNG2). Recombinant human PAX8 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

**Form:** Liquid. In Phosphate buffer saline (pH 7.4) containing 20% glycerol , 1mM DTT

**Molecular Weight:** 33.4 kDa (310aa) confirmed by MALDI-TOF

**Sequences:**

MGSSHHHHHSSGLVPRGSHMGSMPHNSIRSGHGGLNQLGGAFVNGRPLPEVVQRIVDLAHQGVRPCDISRQL  
RVSHGCVSKILGRYYETGSIRPGVIGGSKPKVATPKVVEKIGDYKRQNPTMFAWEIRDLLAEGVCDNDTVPSVSSI  
NRIIRTKVQQPFNLPMDSCVATKSLSPGHTLIPSSAVTPPESPQSDSLGSTYSINGLLGIAQPGSDKRKMDDSDQDS  
CRLSIDSQSSSSGPRKHLRTDAFSQHHLEPLECPFERQHYPEAYASPSHTKGEQEVNTLAMPMATPPTPTARPG  
ASPTPAC

**Purity:** > 95% by HPLC

**Concentration:** 0.25 mg/ml (determined by Bradford assay)

**Endotoxin Level:** <1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.