

# Product information

## PAX8, 1-287aa

Human, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP2898

**Full name:** Paired box protein Pax-8 isoform PAX8E

**NCBI Accession No.:** NP\_054698

**Synonyms:** paired box 8

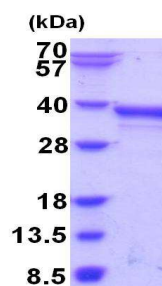
**Description:** Paired box protein Pax-8 isoform PAX8E, also known as PAX8, is expressed in the developing and adult thyroid, the developing secretory system and at lower levels, in the adult kidney. PAX8 complexes with TTF-1 and TTF-2 to induce thyroid follicular cell differentiation and thyroid hormone 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

**Purity:** > 90% by SDS - PAGE

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



15% SDS-PAGE (3ug)

### Sequences of amino acids:

MGSSHHHHH SSGLVPRGSH MGSMPHNSIR SGHGGLNQLG GAFVNGRPLP EVVRQRIVDL AHQGVPRCDI SRQLRVSHGC VSKILGRYYE  
TGSIRPGVIG GSKPKVATPK VVEKIGDYKR QNPTMFAWEI RDRLAEGVC DNDTVPSVSS INRIIRTKVQ QPFNLPMDSQ VATKSLSPGH  
TLIPSSAVTP PESQSDSLG STYSINGLLG IAQPGSDKRK MDDSDQDSCR LSIDSQSSSS GPRKHLRTDA FSQHHLEPLE CPPERQHYPE  
AYASPSHTKG EQEVNTLAMP MATPPTPPTA RPGASPTPAC

### General references:

Paters H., *et al.* (1998) *Eur J Oral Sci.* 106: 38-43.

Poleev A., *et al.* (1995) *Eur J Biochem.* 228: 899-911.

**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.

**For research use only. This product is not intended or approved for human, diagnostics or veterinary use.**