

## p63 Protein, Human, Recombinant (His & GST)

### General Information

Synonyms:	p40;TP53L;RHS;B(p51A);p51;KET;NBP;B(p51B);OFC8;tumor protein p63;EEC3;p53CP;p73L;AIS;LMS;TP73L;p73H;p63;TP53CP;SHFM4
Protein Construction:	A DNA sequence encoding the human TP63 isoform 1 (Q9H3D4-1) (Met 1-Glu 680) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus. Predicted N terminal: Met
Species:	Human
Expression Host:	Baculovirus Insect Cells
Accession:	Q9H3D4-1
Molecular Weight:	105 kDa (predicted); 125 kDa (reducing conditions)

### QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 90 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Supplied as sterile 20 mM Tris, 500 mM NaCl, pH 7.4, 0.3 mM DTT, 20% glycerol.

### Preparation and Storage

Reconstitution:	A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.
Stability & Storage:	It is recommended to store the product under sterile conditions at -20°C to -80°C. Samples are stable for up to 12 months. Please avoid multiple freeze-thaw cycles and store products in aliquots. <small>Actual storage temperature shall be subject to the COA.</small>
Shipping:	Proteins are shipped with blue ice.

### Protein Background

Tumor protein p63 is a protein also known as transformation-related protein 63, TP63, and p63. Tumor protein p63 / p63 is a member of the p53 family of transcription factors whose members P53, p63, and p73 have similar features in their gene structures and functions. An animal model, p63<sup>-/-</sup> mice has been useful in defining the role p63 plays in the development and maintenance of stratified epithelial tissues. This p63 encoding protein p63 has a dramatic impact on replenishment of cutaneous epithelial stem cells and on ovarian germ cell survival. Although these two fundamental roles of p63 attest to its powerful place in development, its other functions, specifically the apparent capacity of p63, is to supervise the emergence of new cell populations in the breast, prostate, cervix, and

upper reproductive tract. P63<sup>-/-</sup> mice have several development defects which include the lack of limbs and other tissues, such as teeth and mammary glands, which develop as a result of interactions between mesenchyme and epithelium. Mutations in this protein are associated with ectodermal dysplasia, and cleft lip / palate syndrome 3, ADULT syndrome (acro-dermato-ungual-lacrima-tooth), limb-mammary syndrome, et al.

### Reference

Crum CP, et al. (2010) p63 in epithelial survival, germ cell surveillance, and neoplasia. *Annu Rev Pathol.* 5: 349-71.

Tan M, et al. (2001) p53CP is p51/p63, the third member of the p53 gene family: partial purification and characterization. *Carcinogenesis.* 22 (2): 295-300.

Shiran MS, et al. (2007) p63 as a complementary basal cell specific marker to high molecular weight-cytokeratin in distinguishing prostatic carcinoma from benign prostatic lesions. *Med J Malaysia.* 62 (1): 36-9.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481