



## Product Datasheet

<b>Product Name</b>	Transforming Growth Factor Beta Receptor II Human Recombinant
<b>Cata No</b>	CB501431
<b>Source</b>	<i>Escherichia Coli.</i>
<b>Synonyms</b>	AAT3, FAA3, MFS2, RIIC, LDS1B, LDS2B, TAAD2, TGFR-2, TGFbeta-RII, TGFBR-2, TGF-beta receptor type-2, Transforming growth factor-beta receptor type II, TGF-beta receptor type II, TGF-beta type II receptor, TbetaR-II, TGFBR2.

### Description

TGFBR2 is part of the Ser/Thr protein kinase family and the TGFβ receptor subfamily. TGFBR2 is a transmembrane protein that has a protein kinase domain, forms a heterodimeric complex with another receptor protein, and binds TGF-β. This receptor/ligand complex phosphorylates proteins, which then enter the nucleus and regulate the transcription of a subset of genes related to cell proliferation. Mutations in TGFBR2 gene have been associated with Marfan Syndrome, Loeys-Deitz Aortic Aneurysm Syndrome, and the development of various types of tumors. TGFBR2 expression is increased in oral squamous cell carcinoma cells. TGFBR2 attenuates the biological activities of TGF-β in colorectal cancer. TGFBR2 expression is decreased by IL-1β while inducing Sp3 via NFκB. TGFβ2 and TGFBR2 are involved in the antiestrogenic activity of tamoxifen metabolites in breast cancer.

TGFBR2 Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain encoding 133 amino acids (27-159 a.a.) and having a molecular mass of 15 kDa.

HXK1 is purified by proprietary chromatographic

techniques.

### Physical Appearance

Sterile filtered colorless solution.

### Purity

Greater than 97.0% as determined by SDS-PAGE.

### Formulation

The protein contains 150mM NaCl & 50mM sodium phosphate buffer pH-7.5.

### Sequence

```
HVQK SVNNDMIVTD NNGAVKFPQL  
CKFCDVRFST CDNQKSCMSN CSITSICEKP  
QEVCVAVWRK NDENITLETV CHDPKLPYHD  
FILEDAASPK CIMKEKKKPG ETFFMCSCSS  
DECNDNIIFS EYNTSNPD.
```

### Applications

Western blot, ELISA. In ELISA assay concentrations 0.6-0.8 µg/ml can be used for TGFβ measurements (in the same assay 0.2 µg/ml TGFβRII-Fc preparation R&D # 341-BR-050).

Other applications have not been tested.

**\* For Non-Clinical Research Use Only \***