***Class:* TGF-beta RII**

Attributes:

Molecule Type: Protein

Primary Sequence:

Source: NCBI

Accession Number: gi: 23308727

Synonyms:

Molecular Weight (kDa): 70-80kD

Cellular location: **GO:0005887:** integral to plasma membrane
GO:0005768: endosome

Chromosome location: 3p22

Structure:

Domain Information:

Modifications: **GO:0005524:** ATP binding
GO:0042803: protein homodimerization activity (dimerize)

Functions: **GO:0050431:** Transforming growth factor beta binding
GO:0005160: TGF-beta receptor binding
GO:0016740: transferase activity
GO:0043130: ubiquitin binding

Processes involved in:

GO:0007179: TGF-beta receptor signaling pathway
GO:0007181: TGF-beta receptor complex assembly
GO:0007165: Signal transduction
GO:0006468: protein amino acid phosphorylation

Responsibilities:	***Collaborators:***
Initiates formation of the receptor complex assembly, which leads to phosphorylation of RI by RII	TGF-beta (1)
Dimerization for receptor complex assembly	TGF-beta RII (1)
Phosphorylates type I receptor thereby propagating TGF-beta signal	TGF-beta RI (1)
TAB1 links the TGF-beta pathway to the MAPK pathway	TAB1(2)
Functional role unkown, but association results in phosphorylation of TRIP-1	TRIP-1 (3)

1) Massague, J., (1998) TGF-beta signal transduction, *Annu Rev Biochem*, **67(**753-91.
2) Shibuya, H., et al., (1996) TAB1: an activator of the TAK1 MAPKKK in TGF-beta signal transduction, *Science*, **272(5265),** 1179-82.
3) Chen, R.H., et al., (1995) A WD-domain protein that is associated with and phosphorylated by the type II TGF-beta receptor, *Nature*, **377(6549),** 548-52.