Class: TGF-beta 1

Attributes:
Molecule Type: Protein
Primary Sequence: Source: NCBI
Accession Number: gi: 56605975
Synonyms:
Molecular Weight (kDa): 44
Cellular location: GO:0005615: extracellular space
Chromosome location: 19q13.1
Structure:
  Domain Information:
  Modifications: GO:0042803: protein homodimerization activity (dimerize)
  Functions: GO:0005160: TGF-beta receptor binding

Processes involved in:
  GO:0007179: TGF-beta receptor signaling pathway
  GO:0007181: TGF-beta receptor complex assembly
  GO:0007165: Signal transduction

Responsibilities: Collaborators:
necessary for formation of signaling complex formation TGF-beta RI (1)
necessary for formation of signaling complex formation TGF-beta RII(1)
Dimerization possibly allows TGF-beta to bind one type I receptor and one type II receptor necessary for receptor complex assembly TGF-beta (2)
clears growth factor from serum alpha 2- macroglobulin receptor (3)
may change TGF-beta from latent to a bioactive conformation Fibronectin (4)
may store bioactive TGF-beta in extracellular matrix collagen IV (5)
interferes with binding of TGF-beta to receptors 60 kDa protein (6)