Name: Protein GrpE
Function:
Participates actively in the response to hyperosmotic and heat shock by preventing the aggregation of stress-denatured proteins, in association with DnaK and GrpE. It is the nucleotide exchange factor for DnaK and may function as a thermosensor. Unfolded proteins bind initially to DnaJ; upon interaction with the DnaJ-bound protein, DnaK hydrolyzes its bound ATP, resulting in the formation of a stable complex. GrpE releases ADP from DnaK; ATP binding to DnaK triggers the release of the substrate protein, thus completing the reaction cycle. Several rounds of ATP-dependent interactions between DnaJ, DnaK and GrpE are required for fully efficient folding.
Source:
We searched on NCBI with the accession number obtained and confirmed on Uniprot our Blast results**:**
GO - Molecular functioni
adenyl-nucleotide exchange factor activity Source: InterPro
GO - Biological processi
protein folding Source: InterPro
We found also information about the interaction with other structures:
"Homodimer"
This protein has a subcellular location in the cytoplasm.
Score of 2 out 5 "-Protein inferred from homology"