Euglenophyta are monophyletic group of euglenids defined by presence of green, three membrane-bound plastid which has been aquired via secondary endosymbiosis with chlorophyte alga. Mechanism of transport of nuclear-encoded proteins into this plastid is not yet completely understood. It was observed that the proteins are transported to the outermost plastid membrane in vesicles passing through ER and Golgi, but the mechanism of their recognition and fusion with the target membrane remains unclear. Translocation system of inner two membranes is still completely unknown, regarding the situation in other plastids, it has been proposed that homologues of TOC and TIC complexes are present. In this work we analyzed sequence data from proteome of isolated plastid membranes of model organism Euglena gracilis and transcriptome of E. gracilis and its distant relative Eutreptiella gymnastica. We studied whether they contain proteins potentially involved in transport and homologues of proteins of transport systems known from plastids in other organisms (TOC/TIC, ERAD-like transport, SNARE). However, all our results are negative. It is hard to determine whether these findings indicate the possible absence of TOC and TIC complexes in euglenid plastid, or rather the insufficiency of our data.