In molecular biology, tat is a protein that is encoded for by the tat gene in HIV-1.

Tat is a regulatory protein that drastically enhances the efficiency of viral transcription.

Tat stands for “Trans-Activator of Transcription”. The protein consists of between 86 and 101 amino acids depending on the subtype.

Tat vastly increases the level of transcription of the HIV dsDNA. Before Tat is present, a small number of RNA transcripts will be made, which allow the Tat protein to be produced. Tat then binds to cellular factors and mediates their phosphorylation, resulting in increased transcription of all HIV genes, providing a positive feedback cycle. This in turn allows HIV to have an explosive response once a threshold amount of Tat is produced, a useful tool for defeating the body's response [1]).

1)

https://en.wikipedia.org/wiki/Tat_(HIV