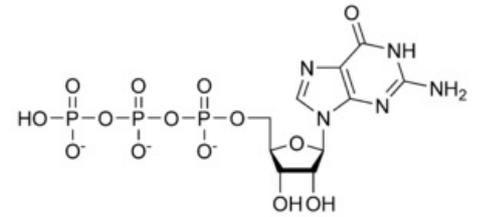


# Guanosine triphosphate

Guanosine triphosphate or **GTP** is used as an energy source during translation. It also participates in the dynamic variability of microtubules, which are an important part of the cell's cytoskeleton. They maintain its shape and ensure intracytoplasmic transport. It does not play a pivotal role in the polymerization of GTP. However, it has been proven that only the **hydrolysis of GTP to GDP** (guanosine diphosphate) can start the depolymerization of the microtubule, which occurs after the microtubule fulfills its function - it transports the given molecule to the designated place in the cell.



Chemical formula of GTP

## Links

### Related articles

- G-protein
- NADPH
- ATP

### External links

- [Guanosine triphosphate \(English Wikipedia\)](#)

### References

- ALBERTS, B, D BRAY and A JOHNSON, et al. *Basics of cell biology*. 2nd edition. Prague: Espero Publishing, 2005. 740 pp. ISBN 80-902906-2-0.
- VAJNER, Luděk, et al. *Medical histology I : General cytology*. 1st edition. 2010. 0 pp. ISBN 978-80-246-1860-9.