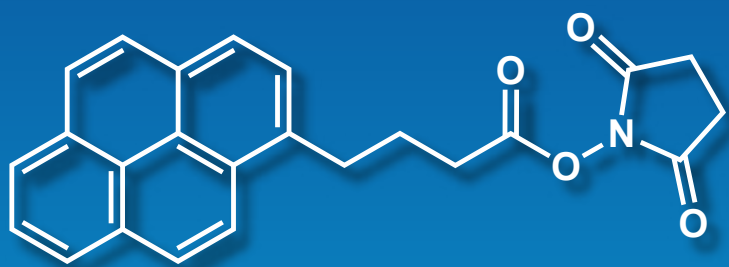


# Linker Molecule for CNTs/Graphene FET Biosensors PBASE

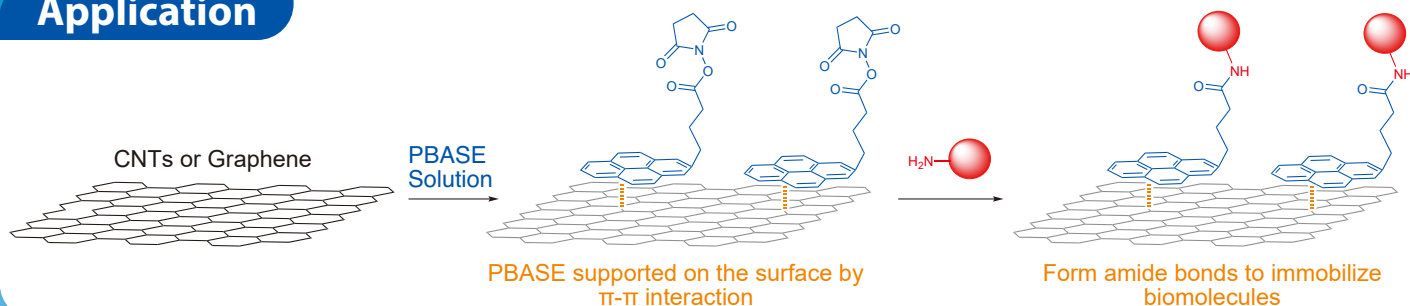


**1-Pyrenebutanoic Acid Succinimidyl Ester  
(= PBASE)**  
250mg / 1g / 5g  
**[P2767]**

**1-Pyrenebutanoic Acid Succinimidyl Ester (PBASE)** is one of the frequently used linkers for the surface modification of FET biosensors based on carbon nanotubes (CNTs) and graphene.

The pyrene moiety of PBASE and the CNTs/graphene surface form non-covalent bonds through  $\pi$ - $\pi$  stacking interactions. Therefore, when subsequently reacted with a biomolecule containing amino groups, PBASE immobilizes any biomolecules while preserving the structure and function of CNTs/graphene surfaces.

## Application



## References

- 1) Noncovalent Sidewall Functionalization of Single-Walled Carbon Nanotubes for Protein Immobilization  
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- 2) Sensors Based on the Carbon Nanotube Field-Effect Transistors for Chemical and Biological Analyses  
Y. Deng, L. Liu, J. Li, L. Gao, *Biosensors* **2022**, 12, 776. <https://doi.org/10.3390/bios12100776>
- 3) A label-free biosensor based on graphene and reduced graphene oxide dual-layer for electrochemical determination of beta-amyloid biomarkers  
J. Sethi, G. Pan, *et al.*, *Microchim. Acta* **2020**, 187, 288. <https://doi.org/10.1007/s00604-020-04267-x>

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