

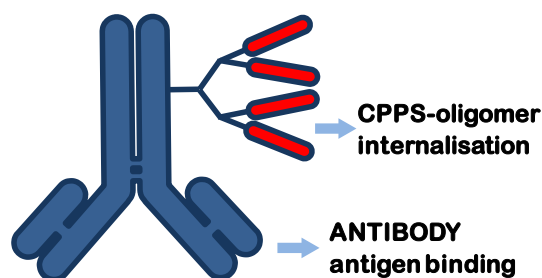
228-12: Improved Internalisation and Clearance of Antibodies

Key Facts

- ✓ Protein – cell-penetrating peptide conjugates
- ✓ Improved internalization and pharmacokinetics

The Technology

This invention relates to conjugates containing a protein and multivalent cell-penetrating peptides. These conjugates show improved cell binding and internalisation rates. A method for generating these conjugates for the use of medical diagnosis, prevention and/or treatment of diseases and in research is provided. As shown for an anti-EGFR-Antibody the conjugates attain a 10-20 fold internalization rate and a pharmacokinetics with an increased tumor to background ratio increased by approximately 100%.



Background

The application of novel biological therapeutics based on molecular medicine knowledge is often complicated by the large size of these compounds. Most biological therapeutics with a pronounced specificity, such as antibodies, possess a high molecular weight, which i.e. results in unfavourable pharmacokinetic qualities setting hurdles for their clinical applications. The successful clinical application of many high molecular weight drugs is hampered by their inability to efficiently bind to their target cell surfaces and/or traverse cellular membranes.

Advantages

- ✓ improved cell binding
- ✓ improved cell uptake
- ✓ suitable for diagnosis, prognosis and/or treatment and research

Commercial Opportunity

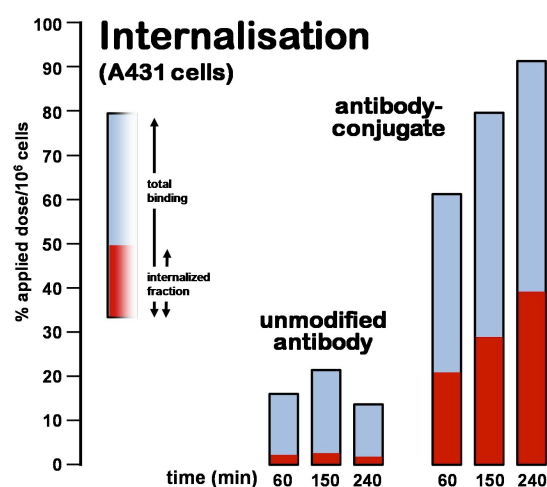
The technology is available for in-licensing for development and commercialization

Inventors

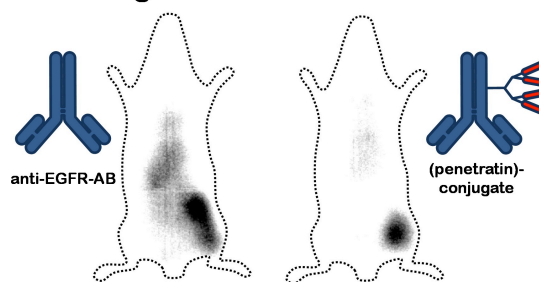
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Intellectual Property

US PROV 61/733,619



Excellent tumor targeting – low background



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