

ADC and Bioconjugates



Ofichem has extensive experience in providing services related to antibody-drug conjugates (ADCs), which have recently attracted major interest in the field of cancer treatment.

By linking potent cytotoxins to monoclonal antibodies, highly potent active pharmaceutical ingredients (APIs), also known as payloads, can be delivered directly to the tumour cells, resulting in a lower impact on healthy cells and tissues.

Ofichem has worked with a variety of highly potent payloads, as well as developing a selection of cleavable and non-cleavable linkers and spacers, designed to bind the payload to the antibody and then trigger its release within the cancer cell. Our expert scientists can provide a range of linker strategies in order to fine-tune activity and stability in various mediums.

With expertise in organic synthesis, biochemistry, and analytical chemistry, we also provide custom synthesis for other types of bioconjugates including proteins, peptides, carbohydrates, nucleosides, lipids and DSPE-PEG2000 analogues for nanoparticle formulation.

At Ofichem we offer:

- Preparation of antibody-drug conjugates (ADCs)
- Custom design and synthesis of payloads, spacers and linkers
- Preparation and purification of various types of bioconjugates
- Modification of carbohydrates, including polysaccharides and glycoconjugates
- Preparation of lipids and lipid conjugates
- Preparation of fluorescent probes
- Analyses such as HPLC chromatography (RP, SEC, HIC), QToF MS and NMR
- Determination of key parameters such as DAR and extent of aggregation
- Linker-cleavage and protease digestion testing
- Analytical and bioanalytical support, early formulation

