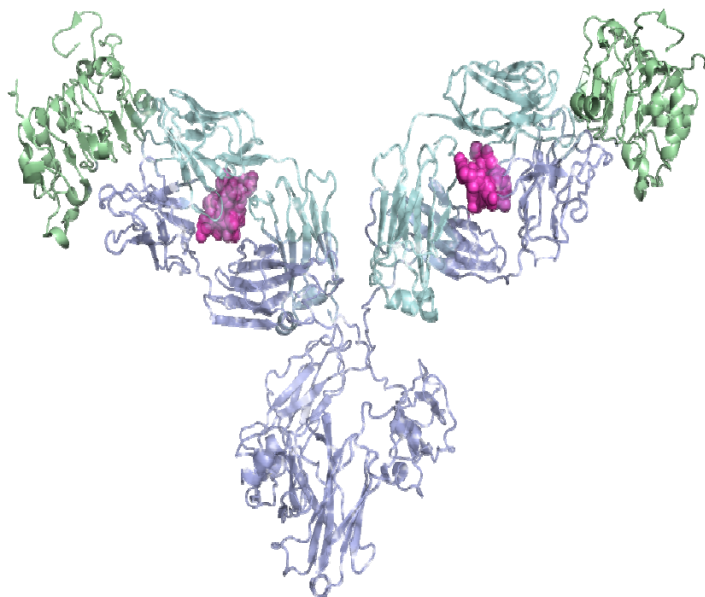


Peptide-mediated scaffolding to monoclonal antibodies



DESCRIPTION

This ground breaking technology covers a high affinity peptide (pink) and its novel binding site within the Fab framework (cyan/light blue). This framework binding site is also distinct from all human IgGs, but only requires four point mutations in the human sequence to enable peptide binding. Importantly, the peptide does not bind to human IgGs. Equally important, the peptide-mAb interaction does not affect antigen binding (green). Consequently, small molecules including toxins, radioisotopes, and bioactive peptides or siRNA can be fused to the peptide and targeted to the disease site through monoclonal antibodies, either for enhanced imaging or therapeutic potential. This technology can be applied to any antibody framework to recreate the novel binding site and imbue new functionality to pre-existing and future mAbs.

KEY ASPECTS

- This is a platform technology broadly applicable to mAbs
- This technology has applications in diagnostics, purification, imaging and therapeutics.
- The mutations pointed out in this disclosure are distinct, and do not affect the antibody's antigen binding affinity.
- The peptide does not bind human IgG mAbs.

INTELLECTUAL PROPERTY

Title	US Application Number	Filed
Mimotopes for IGG binding and scaffolding	61/391,558	10/8/2010

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