ENGINEERED RABBIT ANTIBODY VARIABLE DOMAINS AND USES THEREOF

Abstract

The present invention relates to methods for screening and producing polypeptides that immunospecifically bind to an antigen, which : polypeptides comprise binding domains that are derived from rabbit immunoglobulin. Using rabbit antibody heavy-chain or light-chain scaffolds, the methods of the invention allow identification of novel CDR loops and framework regions that confer enhanced stability and/or affinity to isolated immunoglobulin variable domains, in particular, relative to those derived from rodent antibodies. The enhanced stability and/or affinity of the variable domains of the invention permit their use in the production research tools or therapeutic immunospecific polypeptides, including single domain immunospecific polypeptides, i.e., comprising one of a V_H or V_L domain.

(No suitable figure)