

Single-domain antibody fragments

Camelids produce functional antibodies devoid of light chains of which the single N-terminal domain is fully capable of antigen binding. These single-domain antibody fragments (VHHs, also called sdAb or Nanobodies®) have 1/10th the size of a 150-kDa whole conventional antibody. VHHs have several advantages as compared to conventional antibodies. They are well-expressed in microorganisms and have a high stability and solubility. They are able to recognize cryptic antigenic sites that are normally not recognized by conventional antibodies, such as enzyme active sites. Furthermore, they are well suited for construction of larger molecules and selection systems such as phage, yeast, or ribosome display. For more information please read [Harmsen MM, and De Haard HJ. Properties, production, and applications of camelid single-domain antibody fragments. Appl Microbiol Biotechnol. 2007 Nov; 77\(1\):13-22.](#)