

## Anti-Fab (kappa) [TP975] Standard Size Ab01434-34.11

**Isotype and Format:** Camelid VHH, His-Tagged

**Clone Number:** TP975

**Alternative Name(s) of Target:** antigen-binding fragment kappa light chain

**UniProt Accession Number of Target Protein:**

**Published Application(s):** dot blot assay

**Published Species Reactivity:** Mouse

**Immunogen:** This antibody was raised by immunising alpacas with 1.0 mg polyclonal mouse IgG. Subsequently, the generation of nanobody immune libraries and the selection of antigen-specific nanobodies by phage display from these libraries were performed.

**Specificity:** This antibody recognises mouse kappa light chain.

**Application Notes:** Anti-IgG nanobodies often perform more efficiently than polyclonal secondary antibodies in various experimental assays. Therefore, they are recommended for various experimental procedures. Anti-IgG nanobodies were shown to be more sensitive during Western blots when conjugated with different molecules (HRP, fluorophores etc.) (Pleiner et al., 2018). Furthermore, combination of two distinct nanobodies for immunofluorescence labelling provided exceptionally clean and strong signal, unprecedented among monovalent secondary antibodies (Pleiner et al., 2018). Additionally, using such an antibody allows skipping two-step incubation procedures during immunostaining as the nanobody can be first incubated with a primary antibody and this conjugate might be added to the cells in a one-step procedure (Pleiner et al., 2018). Finally, this anti-kappa nanobody has been recommended for superresolution microscopy, as it can place the fluorophore much closer to the antigen which had been bound by the primary antibody than a usual secondary antibody would be able to (Pleiner et al., 2018).

**Antibody First Published in:** Pleiner et al. A toolbox of anti-mouse and anti-rabbit IgG secondary nanobodies. J Cell Biol. 2018 Mar 5;217(3):1143-1154. doi: 10.1083/jcb.201709115. Epub 2017 Dec 20. PMID:29263082

**Note on publication:** The article describes the generation and characterisation of this nanobody.

## Product Form

**Size:** 50 µg Purified antibody.

**Purification:** Purified by Immobilized Metal Affinity Chromatography

**Supplied In:** PBS with 0.02% Proclin 300.

**Storage Recommendation:** Store at 4°C for up to 3 months. For longer storage, aliquot and store at -

20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.