Anti-IgG1/2a Fab (k) [TP888] Standard Size Ab01449-1.9

This chimeric mouse antibody was made using a variable domain sequence of the original VHH format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Mouse IgG1-Fc fusion, His-Tagged
Clone Number: TP888
Alternative Name(s) of Target: immunoglobulin G1; immunoglobulin G2a; 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 Fab of the IgG1 and IgG2a which contain kappa light chain (the binding seems to be dependent on the CH1 region and the light chain type simultaneously).
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 immunostaing 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, such nanobodies have been recommended as very effective for colocalisation studies when more than one fluorophore is needed (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: 200 µg Purified antibody.
Purification: Purified by Immobilized Metal Affinity Chromatography
Supplied In: PBS with 0.02% Proclin 300.
Storage Recommendation: Store at 4ºC for up to 3 months. For longer storage, aliquot and store at -20ºC.
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.