

## Anti-Testosterone [77 Fab] Bulk Size Ab00418-1.4-BT

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This reformatted mouse antibody was made using the variable domain sequences of the original Mouse Fab format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Mouse IgG1, Fc Silent<sup>™</sup>, Kappa

Clone Number: 77 Fab

Alternative Name(s) of Target: Fab77; Fab 77 UniProt Accession Number of Target Protein: Published Application(s): crystallography, ELISA Published Species Reactivity: Species independent

Immunogen: Testosterone.

**Specificity:** This antibody is specific for testosterone, a steroid hormone secreted by the testicles that acts as the principle male sex hormone and anabolic steroid.

**Application Notes:** This antibody binds to The original version of this antibody (mouse Fab) was shown to bind testosterone with a  $K_d$  of 0.3 nM and an ED<sub>50</sub> of 4.8 nM (Valjakka et al., 2002; PMID: 12196551). The binding mechanism of this antibody was explored via crystallography (Niemi et al., 2011; 21360611).

**Antibody First Published in:** Valjakka et al. Crystal structure of an in vitro-affinity- and specificity-matured anti-testosterone Fab in complex with testosterone. Improved affinity results from small structural changes within the variable domains. Journal of Biological Chemistry 2002; 277(46):44021-44027 PMID:12196551

**Note on publication:** The original publication describes the generation and structural analysis of a highly selective, high-affinity anti-testosterone Fab fragment, highlighting small structural changes within the variable domains that result in improved affinity and specificity through comprehensive packing of testosterone with the protein.

## **Product Form**

**Size:** 1 mg Purified antibody in bulk size. **Purification:** Protein A affinity purified

Supplied In:

PBS only.

**Storage Recommendation:** Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommed this antibody be handled under sterile conditions. 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.