

## Anti-Testosterone [77 Fab] Standard Size Ab00418-10.7

This antibody is in our proprietary AbFab2™ recombinant F(ab2) format - based on Human IgG1 sequence with a short dimerization domain to improve stability and a his tag.

This chimeric human 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:** Human F(ab)2, AbFab2™ His-Tagged, 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  $ED_{50}$  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:** 200 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.