

mAb mouse anti-Amphiregulin clone AR37

(No. M7-2388)

Principal investigator

Yosef Yarden

Faculty of Biology

Department of Immunology and Regenerative Biology

The AR37 monoclonal antibody recognizes human and mouse amphiregulin (AREG), a member of the epidermal growth factor (EGF) family. AREG is constitutively expressed in many epithelial and mesenchymal cells and in selected leukocyte subsets, including mast cells, basophils, ILC2s, and tissue-resident CD4⁺ Tregs. The membrane-bound AREG precursor is cleaved by TACE/ADAM17 to release soluble AREG, which activates EGFR signaling, promoting cell proliferation, migration, and differentiation.

AR37 binds the extracellular EGF domain of AREG, neutralizing AREG-mediated EGFR phosphorylation and downstream signaling. In preclinical cancer models, AR37 treatment prolonged survival and reduced tumor growth in AREG-expressing ovarian, breast, and prostate cancers. The antibody shows ~100-fold weaker binding to HB-EGF and no cross-reactivity with other EGF-like ligands (EGF, EREG, TGF- β , epigen, or NRG1).

Isotype: Mouse IgG1, $\hat{\imath}$

Application

in vivo blocking of amphiregulin (AREG)

in vitro blocking of amphiregulin (AREG)

Immunofluorescence

Western blot

ELISA

References

[Lindzen et al. Oncogene. 2021](#) [1]