**Technical Data Sheet**

*InVivoMAb anti-human EGFR*

**Lot Specific Information**

Lot Number: Lot Specific*
Volume: Lot Specific*
Concentration: Lot Specific* (generally 4 to 11 mg/ml) *
Total Protein: Lot Specific*

*This information will be noted on the certificate of analysis that ships with this product.

**Product Information**

Catalog Number: BE0279
Clone: 528
Isotype: Mouse IgG2a
Recommended Isotype Control(s): InVivoMAb mouse IgG2a isotype control, unknown specificity
Recommended Dilution Buffer: InVivoPure pH 7.0 Dilution Buffer
Immunogen: Purified EGFR from A431 cells

- *in vitro* EGFR blockade
- *in vivo* EGFR blockade in xenografts
- Western blot
- Functional assays
- Immunoprecipitation
- Immunohistochemistry (paraffin)
- Immunofluorescence
- Flow cytometry

Formulation: PBS, pH 7.0
Contains no stabilizers or preservatives
Endotoxin: <2EU/μg (<0.002EU/μg)
Determined by LAL gel clotting assay
Purity: >95%
Determined by SDS-PAGE
Sterility: 0.2 μM filtered
Production: Purified from tissue culture supernatant in an animal free facility
Purification: Protein A
RRID: AB_2687802
Molecular Weight: 150 kDa

**Description**

The 528 monoclonal antibody reacts with an epitope on the extracellular domain of human EGFR (epidermal growth factor receptor) also known as ErbB-1. EGFR is a 170 kDa cell-surface receptor and belongs to the ErbB family of receptors. EGFR signaling is activated upon binding one of its ligands including epidermal growth factor (EGF), transforming growth factor α (TGF α), Amphiregulin, and heparin-binding-EGF (HB-EGF). Upon activation, EGFR transitions from an inactive monomeric form to an active homodimer. This initiates several downstream signal transduction cascades including the MAPK, Akt and JNK pathways, leading to DNA synthesis and cell proliferation. EGFR overexpression or constitutive activation are associated with many cancers. For this reason, anti-EGFR monoclonal antibody mediated immunotherapies are currently being explored as cancer treatments. The 528 antibody has been reported to block EGF binding to its receptor and inhibit A431 tumor formation in nude mice.

**Shelf-life and Storage**

Store at the stock concentration at 4°C. **Do not freeze.**

All Bio X Cell antibodies have a guaranteed shelf-life of one year from the date of customer receipt when stored as recommended. It is not uncommon for a floccule or precipitate to appear during storage. The floccule is typically buffer salts precipitating out of solution or a small bit of protein aggregation. For information on how to remove floccules or precipitates see our FAQ's at bxcell.com/faqs.

**Protocol Information**

Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

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Binding Validation

Western blot data shown below confirms that this clone binds to its target antigen. For lot specific binding validation data, email technicalservice@bxcell.com.

Lane 1: 1 μg reduced purified human EGFR with histidine tag
Lane 2: 0.25 μg reduced purified human EGFR with histidine tag

Primary: anti-human EGFR antibody (528) at 20 μg/ml

Secondary: HRP labeled goat anti-mouse at 1:1000 dilution

Predicted band size: 110 kDa