Technical Data Sheet

RecombiMAb anti-mouse EGFR (domain-II)

Attention: Use of this product constitutes an agreement to Bio X Cell's Terms and Conditions which are included with this product in print and can also be found at https://bioxcell.com/terms-and-conditions.

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:	**CP068**
Clone:	**EMab-301-CP068**
Isotype:	Rat IgG2a, κ
Recommended Isotype Control(s):	InVivoPlus rat IgG2a isotype control, anti-trinitrophenol
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Immunogen:	mouse EGFR overexpressing cells
Reported Applications:	Western Blot For information on applications, please contact (technicalservice@bioxcell.com)
Formulation:	PBS, pH 7.0 Contains no stabilizers or preservatives
Endotoxin:	≤0.5EU/mg (≤0.0005EU/μg) Determined by LAL gel clotting assay
Purity:	≥95% Determined by SDS-PAGE
Sterility:	0.2 μm filtration
Production:	Purified from mammalian cell supernatant in an animal-free facility
Purification:	Protein G
Aggregation:	<5% Determined by SEC
RRID:	
Molecular Weight:	150 kDa

Murine Pathogen Test Results

Mouse Norovirus: Negative, Mouse Parvovirus: Negative, Mouse Minute Virus: Negative, Mouse Hepatitis Virus: Negative, Reovirus Screen: Negative, Lymphocytic Choriomeningitis virus: Negative, Lactate Dehydrogenase-Elevating Virus: Negative, Mouse Rotavirus: Negative, Theiler's Murine Encephalomyelitis: Negative, Ectromelia/Mousepox Virus: Negative, Hantavirus: Negative, Polyoma Virus: Negative, Mouse Adenovirus: Negative, Sendai Virus: Negative, Mycoplasma Pulmonis: Negative, Pneumonia Virus of Mice: Negative, Mouse Cytomegalovirus: Negative, K Virus: Negative

Description

The EMab-301-CP068 monoclonal antibody is a recombinant version of the original EMab-301 antibody. The variable domain sequences are identical but the constant region sequences have been converted from rat IgM to rat IgG2a. EMab-301-CP068 selectively binds extracellular domain II of mouse EGFR (epidermal growth factor receptor). Domain II is a critical segment of the receptor's extracellular region responsible for mediating receptor dimerization and activation upon ligand binding. Mouse EGFR (also known as ERBB, ERBB1, and HER1) is a transmembrane glycoprotein and a member of the ErbB family of receptor protein tyrosine kinases (RTKs). EGFR ligands include EGF, AREG, TGF-α, epiregulin (EREG), epigen, betacellulin, and heparin-binding EGF. Upon ligand binding, EGFR dimerizes and is activated through autophosphorylation of the cytoplasmic domain. EGFR activation triggers several downstream signaling pathways, including

RAS-RAF-MEK-ERK, PI3 kinase-AKT, PLC-γ-PKC, and STATs which help the cell respond accurately to extracellular signals. EGFR is expressed ubiquitously in various tissues and plays critical roles in developmental, physiological, and regenerative processes. The aberrant activation of EGFR is a common feature of various malignancies.

Storage

Store at the stock concentration at 4°C . **Do not freeze.**
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 https://bioxcell.com/faqs.

Protocol Information

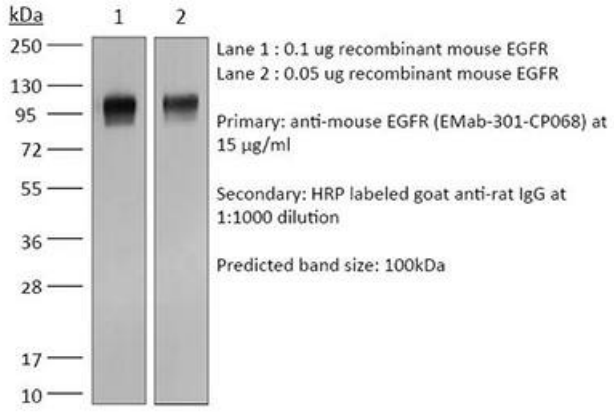
Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

Application References

For a complete list of references, visit https://bioxcell.com/cp068?bxcs=9k1b3a#tab_references or scan the QR code below.

Binding Validation

Validation data shown below confirms that this clone binds to its target antigen. For lot specific binding validation data, e-mail technicalservice@bioxcell.com.



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