Human EGFR (aa 746-750 deletion) Antibody

Monoclonal Mouse IgG_{2A} Clone # 752502

Catalog Number: MAB8336

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human EGFR with the aa 746-750 deletion in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG_{2A} Clone # 752502
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human EGFR synthetic peptide CPVAIKTSPKAN Accession # P00533
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS.

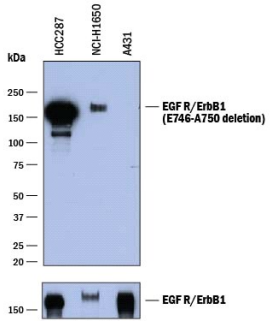
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below
Immunocytochemistry	8-25 µg/mL	See Below
Simple Western	20 µg/mL	See Below

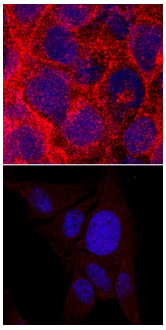
DATA

Western Blot



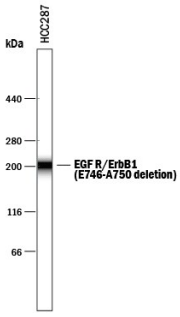
Detection of Human EGFR (aa 746-750 deletion) by Western Blot. Western blot shows lysates of HCC827 human non-small cell lung cancer cell line, HCT-116 human colorectal carcinoma cell line, and A431 human epithelial carcinoma cell line. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human EGFR (aa 746-750 deletion) Monoclonal Antibody (Catalog # MAB8336) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for EGFR (aa 746-750 deletion) at approximately 170 kDa (as indicated). For additional reference total EGFR was detected using Goat Anti-Human EGFR Antigen Affinity-purified Polyclonal Antibody (lower panel, Catalog # AF231). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



EGFR (aa 746-750 deletion) in HCC827 Human Cell Line. EGFR (aa 746-750 deletion) was detected in immersion fixed HCC827 human non-small cell lung cancer cell line using Mouse Anti-Human EGFR (aa 746-750 deletion) Monoclonal Antibody (Catalog # MAB8336) at 5 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to plasma membranes and cytoplasm. Negative staining shown in the lower panel with NCI-H1975 human lung epithelial cell line. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

Simple Western



Detection of Human EGFR by Simple Western™. Simple Western lane view shows lysates of HCC827 human non-small cell lung cancer cell line, loaded at 0.5 mg/mL. A specific band was detected for EGFR at approximately 200 kDa (as indicated) using 20 µg/mL of Mouse Anti-Human EGFR (aa 746-750 deletion) Monoclonal Antibody (Catalog # MAB8336). This experiment was conducted under reducing conditions and using the 66-440 kDa separation system.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956

Human EGFR (aa 746-750 deletion) Antibody

Monoclonal Mouse IgG_{2A} Clone # 752502

Catalog Number: MAB8336

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Epidermal growth factor receptor (EGFR, also known as ErbB1 and HER1) is the founding member of the ErbB family of receptor tyrosine kinases. Ligand binding induces receptor dimerization and autophosphorylation on multiple tyrosine residues. *EGFR* exon 19 deletions are in-frame deletions occurring within exon 19, which encodes part of the kinase domain. This mutation occurs with a frequency of approximately 48% in EGFR mutant lung tumors. It affects the catalytic domain (amino acids 746-750), and is predominantly associated with non-small cell lung cancer (1). In a metastatic setting, EGFR deletions like aa746-750 are predictors of efficacy of the EGFR tyrosine kinase inhibitors (1, 2).

References:

1. Lynch, T. *et al.* (2004) N Engl J Med. **350**:2129.
2. Carey, K. *et al.* (2006) Cancer Res **66**:8163.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956