

Anti-human Epidermal Growth Factor Monoclonal Antibody Clone 1B11-3E12

Supplied as the IgG fraction from Ascites Fluid
MC-2572 Lot # 8240

This IgG fraction was isolated from ascites fluid and contains mouse monoclonal antibody clone 1B11-3E12 raised against recombinant hEGF. The 50 µg of purified IgG has been packaged in 0.10 ml of 10 mg/ml BSA in PBS as carrier protein. This monoclonal antibody has been found to stain specifically hEGF by immunocytochemistry and in western blots. This monoclonal antibody was tested for recognition of TGF α and other growth factors by ELISA techniques. By isotyping, it is a mouse IgG1 kappa.

Monoclonal Antibody Specificity

Polypeptide	% Cross Reactivity
EGF(human)	100
TGF α	0
hIGF-1	0
hIGF-2	0

Indirect ELISA

This IgG fraction (at a concentration of 200 ng/ml) has been found by indirect ELISA to bind to hEGF at 1 ng/well and yield an OD greater than 1.0 under standard ELISA conditions.

Immunocytochemistry

This monoclonal antibody has been found to stain specifically cell expressing human EGF at a concentration of 400 ng/ml. The ability of this monoclonal antibody to bind to hEGF was examined in cells fixed with neutral buffered formalin. The fixed cells were incubated for 20 min with 4% normal goat serum, reacted with 60 min with the diluted monoclonal antibody, and then with FITC-conjugated goat anti-mouse IgG. The immunofluorescent staining pattern was observed using epifluorescence microscopy.

Western Immunoblot

Western immunoblots resulted in a single band being detected at ~ 6.2 kDa at a concentration of 400 ng/ml.

Western Blotting Protocol

1. After SDS-PAGE on 15% percent gels and electrophoretic transfer to PVDF membrane, block the membrane overnight with 4% normal goat serum in TBS/Tween-20 buffer as diluent.
2. Wash x 2 with TBS/Tween-20.
3. Apply the IgG fraction after diluting to a concentration of 400 ng/ml. (Note: more dilute solutions may be needed) Use 2% normal goat serum in TBS/Tween-20 as buffer for the primary antibody. Let the primary antibody bind for 2-4 hours.
4. Wash x 3 with TBS/Tween-20.
5. Apply affinity purified HRP-goat anti-mouse IgG antiserum diluted 1:2500 (dilution may vary depending upon supplier) in 2% normal goat serum in TBS/Tween-20. Incubate 1-2 hours. Note: greater sensitivity may be achieved using ABC techniques.
6. Wash for 5 min x 4 in TBS/Tween-20.
7. Develop color using the enhanced DAB reaction.