

## **Anti-human Epidermal Growth Factor Monoclonal Antibody Clone 3A3-11H11**

Supplied as the IgG fraction from Ascites Fluid  
MC-2577 Lot # 8241

This IgG fraction was isolated from ascites fluid and contains mouse monoclonal antibody clone 3A3-11H11 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 TGFα and other growth factors by ELISA techniques. By isotyping, it is a mouse IgG1 kappa.

### **Monoclonal Antibody Specificity**

<b>Polypeptide</b>	<b>% Cross Reactivity</b>
EGF(human)	100
TGFα	0
hIGF-1	0
hIGF-2	0

### **Indirect ELISA**

This IgG fraction (at a concentration of 100 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 200 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 200 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 200 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.