Catalog # HGS-S242



#### Background

Receptor tyrosine kinase binding ligands of the EGF family and activating several signaling cascades to convert extracellular cues into appropriate cellular responses. Known ligands include EGF, TGFA/TGF-alpha, AREG, epigen/EPGN, BTC/betacellulin, epiregulin/EREG and HBEGF/heparin-binding EGF. Ligand binding triggers receptor homo- and/or heterodimerization and autophosphorylation on key cytoplasmic residues. The phosphorylated receptor recruits adapter proteins like GRB2 which in turn activates complex downstream signaling cascades. Activates at least 4 major downstream signaling cascades including the RAS-RAF-MEK-ERK, PI3 kinase-AKT, PLCgamma-PKC and STATs modules 13. May also activate the NF-kappa-B signaling cascade. Also directly phosphorylates other proteins like RGS16, activating its GTPase activity and probably coupling the EGF receptor signaling to the G protein-coupled receptor signaling. Also phosphorylates MUC1 and increases its interaction with SRC and CTNNB1/beta-catenin. Positively regulates cell migration via interaction with CCDC88A/GIV which retains EGFR at the cell membrane following ligand stimulation, promoting EGFR signaling which triggers cell migration. Plays a role in enhancing learning and memory performance (By similarity).

#### **Host Species**

Mouse
Clone
2A4
Application
HC
Property
1: 1000
State
Liquid

#### **Positive Control**

Human Placenta Tissues
Clonality

Monoclonal

Synonym

ERBB, ERBB1

**Research Field** 

Cancer Drug Targets

Source

Mouse

Isotype

IgG

#### Storage

Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.

### **Typical Data**

**Control Sample** 



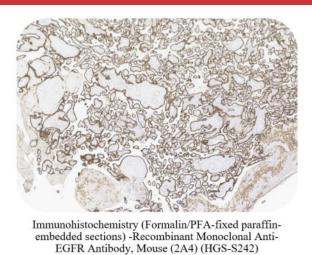
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#### Recombinant Monoclonal Anti-EGFR Antibody, Mouse (2A4)

Catalog # HGS-S242



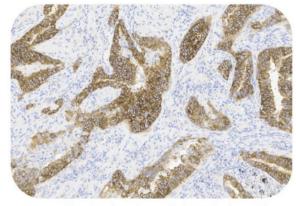


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) -Recombinant Monoclonal Anti-EGFR Antibody, Mouse (2A4) (HGS-S242) Human PlacentaTissue 20X

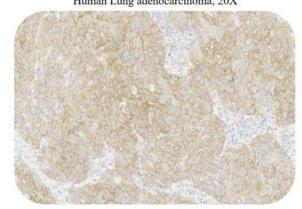
Immunohistochemical analysis of paraffin embedded Human placenta Tissues labelled with HGS-S242 at 1/1000 dilution. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Human PlacentaTissue, 4X

#### **Cancer Sample**

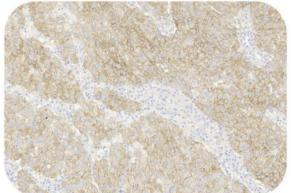


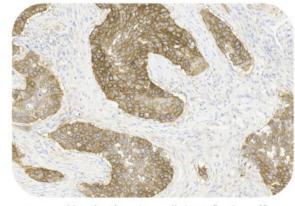
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) -Recombinant Monoclonal Anti-EGFR Antibody, Mouse (2A4) (HGS-S242) Human Lung adenocarcinoma, 20X



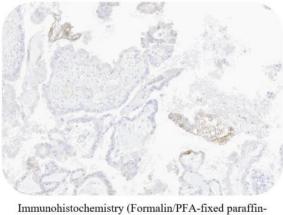
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) -Recombinant Monoclonal Anti-EGFR Antibody, Mouse (2A4) (HGS-S242)

Human Liver Cancer, 20X

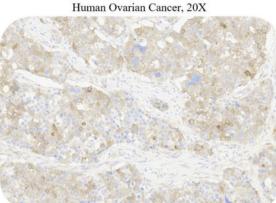




Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) -Recombinant Monoclonal Anti-EGFR Antibody, Mouse (2A4) (HGS-S242) Human Lung squamous cell carcinoma, 20X



embedded sections) -Recombinant Monoclonal Anti-EGFR Antibody, Mouse (2A4) (HGS-S242)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) -Recombinant Monoclonal Anti-EGFR Antibody, Mouse (2A4) (HGS-S242) Human Liver Cancer, 20X

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) -Recombinant Monoclonal Anti-EGFR Antibody, Mouse (2A4) (HGS-S242) Human Gastric cancer, 20X

Immunohistochemical analysis of paraffin embedded human cancer tissue labelled with HGS-S242 at 1/1000 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



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Catalog # HGS-S242

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## **Clinical and Translational Updates**

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.



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