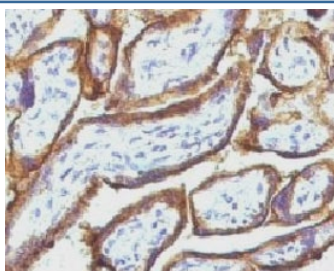


## EGFR Antibody [clone ERB7-1] (V7019)

Catalog No.	Formulation	Size
V7019-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7019-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7019SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7019IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

**Bulk quote request**

<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Clonality</b>	Monoclonal (mouse origin)
<b>Isotype</b>	Mouse IgG2a, kappa
<b>Clone Name</b>	ERB7-1
<b>Purity</b>	Protein G affinity chromatography
<b>UniProt</b>	P00533
<b>Localization</b>	Cell surface
<b>Applications</b>	Immunohistochemistry (FFPE) : 2-4ug/ml for 30 min at RT Prediluted IHC Only Format : incubate for 30 min at RT (1)
<b>Limitations</b>	This EGFR antibody is available for research use only.



IHC staining of FFPE human placenta with EGFR antibody (clone ERB7-1). Digest formalin-fixed tissues with Protease at 1mg/ml PBS, pH 7.4 for 10 min at 37°C.

## Description

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, amphiregulin, 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. 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. [UniProt]

## Application Notes

Titration of the EGFR antibody may be required for optimal performance.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

## Immunogen

Purified EGF receptor was used as the immunogen for the EGFR antibody.

## Storage

Store the EGFR antibody at 2-8°C (with azide) or aliquot and store at -20°C or colder (without azide).