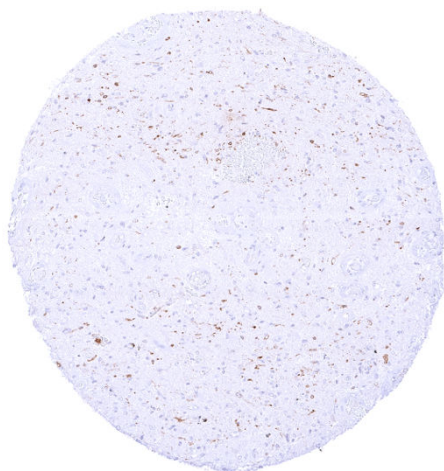


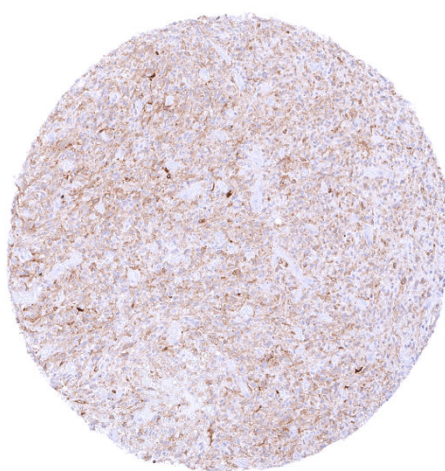
Anti- EGFRvIII Antibody HMV3805 / Recombinant Rabbit monoclonal

Human SwissProt	P00533
Human Gene Symbol	EGFR
Synonyms	EGFRvIII, EGFR mutant, EGFR variant, EGFRv3
Specificity	EGFR
Immunogen	Synthetic peptide of human EGFRvIII
Isotype	Rabbit / IgG
Species Reactivity	Human
Localization	Cytoplasmic

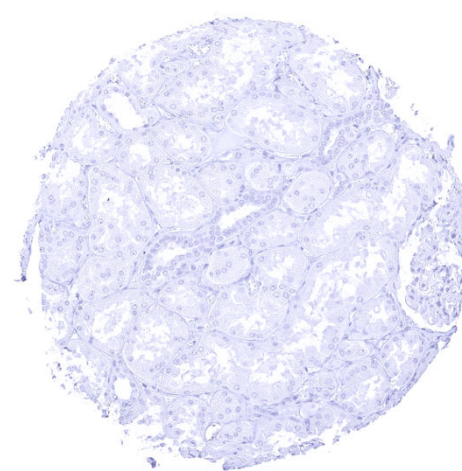
Storage & Stability	Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. Antibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	Purified antibody from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with <1% BSA & <0.1% azide. Antibody concentrate is optimized for dilution within dilution range using commercially available antibody diluent for IHC.
Positive Control	Glioblastoma multiforme with known EGFRvIII mutation: Tumor cells must show a distinct EGFRvIII staining.
Negative Control	Kidney*: EGFRvIII staining must be completely absent in all cells. *Note: other normal tissues can serve as negative controls as well.



Glioblastoma multiforme (tumor periphery) with distinct EGFRvIII positivity of tumor cells.



Glioblastoma multiforme showing a strong EGFRvIII positivity of all tumor cells.



Normal kidney completely lacking EGFRvIII staining.

Biology

The epidermal growth factor receptor (EGFR) receptor protein is coded by the EGFR gene on chromosome 7p11.2. The EGFR variant type III (EGFRvIII) is formed by an 801 base pair in-frame deletion ranging from exons 2 to 7. EGFRvIII is the most common mutation of EGFR in glioblastoma multiforme. It only develops in EGFR amplified tumors and occurs in about 25% of all glioblastomas. EGFRvIII is a ligand-independent receptor. Although its signaling activity is thought to be lower than of activated wild-type EGFR, its constitutive activity results a significant growth advantage to glioblastoma cells, especially in vivo. EGFRvIII is linked to shorter survival of glioblastoma multiforme.

Potential Research Applications

- The prognostic and therapeutic implications of EGFRvIII mutations need to be further clarified.
- Compounds targeting EGFRvIII are under research.
- The functional effects of EGFRvIII mutations are still insufficiently understood.

Protocol Suggestions

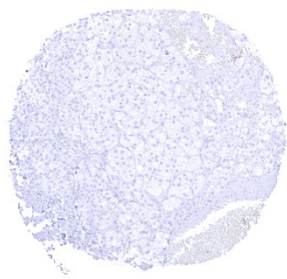
Dilution: 1:50 – 1:100 ; pH 7,8 is optimal. Freshly cut sections should be used (more than 10 days between cutting and staining deteriorates staining intensity for most antibodies in IHC).

Limitations

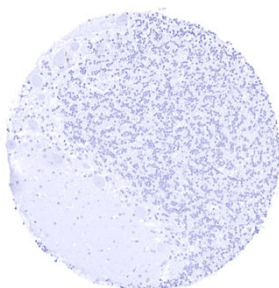
This antibody is available for **research use only** and is not approved for use in diagnostics. A staining of the stratum granulosum of the epidermis by HMV3805 represents a (tolerable) cross-reactivity of the antibody.

Warranty

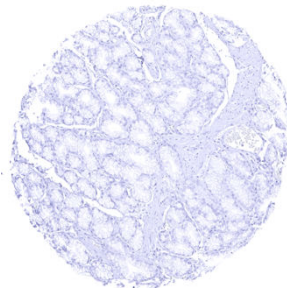
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



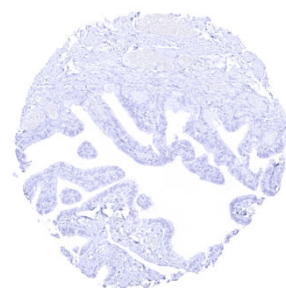
Adrenal gland



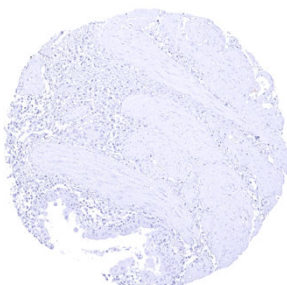
Cerebellum (molecular layer,
Purkinje cell layer, granule cell
layer)



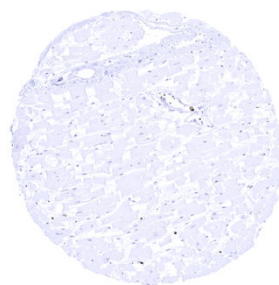
Duodenum, Brunner gland



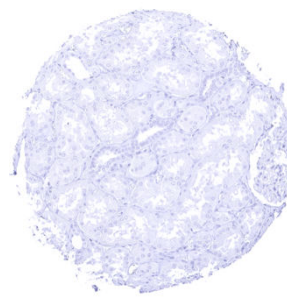
Fallopian tube



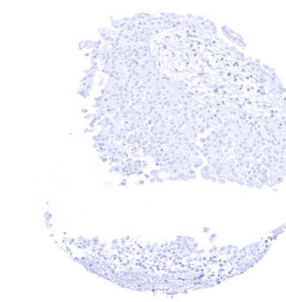
Gallbladder



Heart



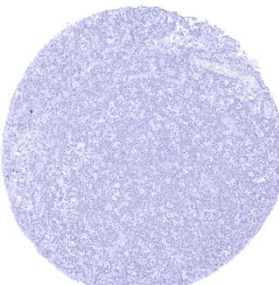
Kidney, cortex



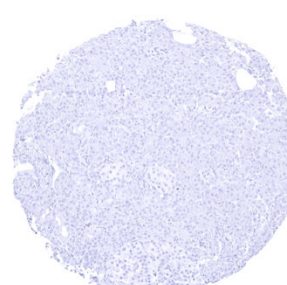
Kidney, pelvis (urothelium)



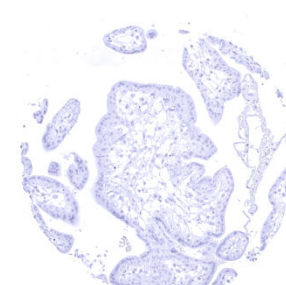
Lung



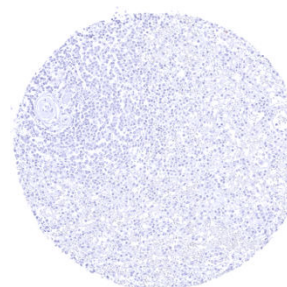
Lymph node



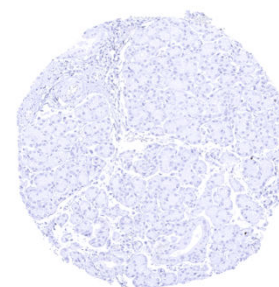
Pancreas



Placenta, early



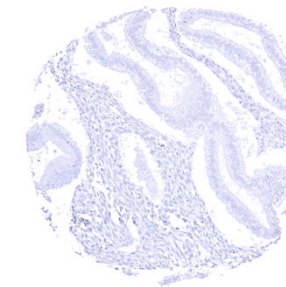
Spleen



Submandibular gland



Uterus, ectocervix



Uterus, endometrium (secretion)