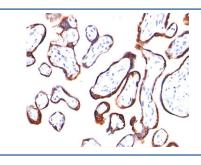


HCG-beta Antibody [clone HCGb/54] (V2092)

Catalog No.	Formulation	Size
V2092-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2092-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2092SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2092IHC-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

Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	HCGb/54
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	1082
Localization	Cytoplasmic, Secreted
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This HCG-beta antibody is available for research use only.



IHC testing of placenta stained with HCG-beta antibody (HCGb/54). Note specific membrane staining. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.

Description

This antibody reacts with a protein of 22kDa, identified as beta subunit of HCG. It does not cross react with the alpha subunit. HCG is a glycoprotein which is secreted in large quantities by normal trophoblasts. It is present only in trace amounts in non-pregnant urine and sera but rises sharply during pregnancy. HCG is composed of two non-identical, non-covalently linked polypeptide chains designated as the alpha and beta subunits. The alpha subunit is identical to that of thyroid stimulating hormone (TSH), follicle stimulating hormone (FSH), and luteinizing hormone (LH). HCG-beta antibody detects cells and tumors of trophoblastic origin such as choriocarcinoma. Large cell carcinoma and adenocarcinoma of the lung demonstrate antibody positivity in 90% and 60% of cases respectively; 20% of lung squamous cell carcinomas are positive. HCG expression by non-trophoblastic tumors may indicate aggressive behavior.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the HCG-beta antibody to be titered up or down for optimal performance.

- 1. Clone HCGb/54 (recommended detect) will pair with clones <u>HCGb/211</u> (recommended capture) and <u>HCGb/459</u> by ELISA.
- 2. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes.
- 3. 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

Recombinant protein was used as the immunogen for this HCG-beta antibody.

Storage

Store the HCG-beta antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CG-beta; CGB3; CGB5; CGB7; CGB8; Choriogonadotropin Subunit beta; hCGB, hCG-beta antibody

References (1)