

# PRODUCT INFORMATION



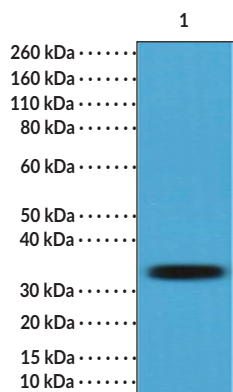
## hCG Rabbit Monoclonal Antibody (Clone RM330)

Item No. 32267

### Overview and Properties

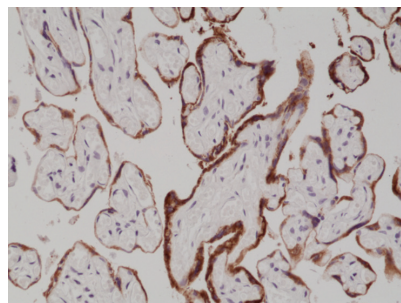
<b>Contents:</b>	This vial contains 100 µl of protein A-affinity purified monoclonal antibody.
<b>Synonym:</b>	Human Chorionic Gonadotropin
<b>Immunogen:</b>	Native hCG protein purified from human urine
<b>Cross Reactivity:</b>	(+) hCGαβ, hCGβ
<b>Species Reactivity:</b>	(+) Human
<b>Form:</b>	Liquid
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	≥1 year
<b>Storage Buffer:</b>	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
<b>Clone:</b>	RM330
<b>Host:</b>	Rabbit
<b>Isotype:</b>	IgG
<b>Applications:</b>	ELISA, immunohistochemistry (IHC), and Western blot (WB); the recommended starting dilution is 1:1,000-1:10,000 for ELISA, 1:500-1:1,000 for IHC, and 1:5,000-1:20,000 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

### Images



Lane 1: hCG protein

WB of hCG protein purified from human urine using hCG Rabbit Monoclonal Antibody (Clone RM330) at a dilution of 1:20,000.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human placenta tissue using hCG Rabbit Monoclonal Antibody (Clone RM330) at a 1:1,000 dilution.

**WARNING**  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

**SAFETY DATA**  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

**WARRANTY AND LIMITATION OF REMEDY**  
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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## Description

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Human chorionic gonadotropin (hCG) is glycoprotein hormone secreted during pregnancy that has important roles in the maintenance of pregnancy.<sup>1,2</sup> It exists as a heterodimer that is composed of two subunits, hCG $\alpha$  and hCG $\beta$ , that are subject to glycosylation, generating a variety of glycosylated hCG variants that have distinct biological functions.<sup>3,4</sup> The expression of genes encoding hCG $\alpha$  and hCG $\beta$  are regulated by a variety of hormones, growth factors, and cytokines.<sup>4</sup> It is secreted by placental trophoblasts during early pregnancy and serum hCG levels peak from gestational weeks 7 to 10.<sup>1</sup> hCG has numerous roles in pregnancy, including stimulating production of progesterone from the corpus luteum and promoting angiogenesis of uterine vasculature and the growth of fetal organs.<sup>5</sup> Urinary hCG levels have been commonly used in the determination of pregnancy.<sup>1</sup> Increased serum, urinary, or tumor levels of hCG $\beta$  have been found in patients with a variety of cancers, including bladder, lung, cervical, or ovarian cancer, and are associated with poor prognosis.<sup>6</sup> Cayman's hCG Rabbit Monoclonal Antibody (Clone RM330) can be used for ELISA, immunohistochemistry (IHC), and Western blot (WB) applications. This antibody recognizes the hCG $\beta$  subunit in both the monomeric and hCG $\alpha\beta$  heterodimeric forms.

## References

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