**hCG beta Antibody Cocktail**

**Catalog Number** MA5-11324

<table>
<thead>
<tr>
<th>Details</th>
<th>Species Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size</strong></td>
<td>500 µL</td>
</tr>
<tr>
<td>Host/Isotope</td>
<td>Mouse / IgG1, kappa/IgG2a, kappa</td>
</tr>
<tr>
<td>Class</td>
<td>Cocktail</td>
</tr>
<tr>
<td>Type</td>
<td>Antibody</td>
</tr>
<tr>
<td>Clone</td>
<td>CG04, CG05</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Purified beta-subunit of HCG</td>
</tr>
<tr>
<td>Conjugate</td>
<td>Unconjugated</td>
</tr>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Concentration</td>
<td>0.2 mg/mL</td>
</tr>
<tr>
<td>Purification</td>
<td>Protein A/G</td>
</tr>
<tr>
<td>Storage buffer</td>
<td>PBS, pH 7.4, with 0.2% BSA</td>
</tr>
<tr>
<td>Contains</td>
<td>0.09% sodium azide</td>
</tr>
<tr>
<td>Storage Conditions</td>
<td>4°C</td>
</tr>
</tbody>
</table>

**Species Reactivity**

- **Species reactivity**: Human
- **Published species**: Human, Rhesus monkey, Not Applicable

**Tested Applications**

- **Immunohistochemistry (Paraffin) (IHC (P))**: Dilution 1-2 µg/mL

**Published Applications**

- **Immunohistochemistry (IHC)**: See 3 publications below
- **Immunocytochemistry (ICC/IF)**: See 3 publications below

*Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.

**MA5-11324 targets Chorionic Gonadotropin Human in IHC (P) applications and shows reactivity with Human samples. The MA5-11324 immunogen is purified beta-subunit of HCG.**

**Background/Target Information**

hCG beta is the beta chain of hCG (Human chorionic gonadotropin), a 40 kDa glycoprotein hormone produced by trophoblastic cells of the placenta beginning 10 to 12 days after conception. hCG is made up of alpha and beta subunits that are non-covalently associated. The alpha subunit is similar to those found on the pituitary hormones FSH, LH ans TSH. However, the beta subunit is different in FSH, LH and TSH and are involved in conferring biological specificity. Maintenance of the fetus in the first trimester of pregnancy requires the production of hCG, which binds to the corpus luteum of the ovary which is stimulated to produce progesterone which in turn maintains the secretory endometrium. hCG 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). Diseases associated with Hcg dysfunction include gestational trophoblastic tumor and hydatidiform mole, recurrent 1.

**Product Images For hCG beta Antibody Cocktail**

**hCG beta Antibody (MA5-11324) in IHC (P)**

Formalin-fixed, paraffin-embedded human placenta stained with hCG-beta antibody using peroxidase-conjugate and DAB chromogen. Note cytoplasmic staining of trophoblasts.
### PubMed References For hCG beta Antibody Cocktail

#### 3 Immunohistochemistry References

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
</table>
| **Human / Not Cited** | MA5-11324 was used in immunohistochemistry to report a clinical case of dedifferentiated liposarcoma of the retroperitoneum with unique features. 

   *Sarcoma (Jul 2011; 2008:)

   "Dedifferentiated Liposarcoma of the Retroperitoneum with Extensive Leiomyosarcomatous Differentiation and beta-Human Chorionic Gonadotropin Production."

   Author(s): Russell MJ, Flynn FL, Harroff AL, Fadare O

   PubMed Article URL: http://dx.doi.org/10.1155/2008/658090 |
| **Rhesus monkey / Not Cited** | MA5-11324 was used in immunohistochemistry to report on a case of non-gestational malignant placental site trophoblastic tumor of the ovary in a 4-year-old rhesus monkey. 

   The American journal of pathology (May 2008; 45: 375)

   "Non-gestational malignant placental site trophoblastic tumor of the ovary in a 4-year-old rhesus monkey."

   Author(s): Marbaix E, Defrère S, Duc KH, Lousse JC, Dehoux JP

   PubMed Article URL: http://dx.doi.org/10.1016/S0002-9440(10)64479-3 |

#### 3 Immunocytochemistry References

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</table>
| **Human / Not Cited** | MA5-11324 was used in immunocytochemistry to investigate the effect of inhibitors of apoptosis on placental cell survival. 

   The American journal of pathology (Aug 2003; 163; 413)

   "Temporal and spatial patterns of expression of inhibitors of apoptosis in human placentas."

   Author(s): Ka H, Hunt JS

   PubMed Article URL: http://dx.doi.org/10.1016/S0002-9440(10)63671-1 |
| **Human / Not Cited** | MA5-11324 was used in immunocytochemistry to develop methods for the isolation and long-term culture of human trophoblast cells from term placentas. 

   Methods in molecular medicine (Dec 2005; 121; 203)

   "Isolation and culture of term human trophoblast cells."

   Author(s): Petroff MG, Phillips TA, Ka H, Pace JL, Hunt JS

   PubMed Article URL: http://dx.doi.org/10.1385/1-59259-983-4:201 |
| **Human / Not Cited** | MA5-11324 was used in immunocytochemistry to investigate the role of FLICE-inhibitory protein in early and late gestation human placentas. 

   Placenta (Jun 2006; 27: 626)

   "FLICE-inhibitory protein: expression in early and late gestation human placentas."

   Author(s): Ka H, Hunt JS

   PubMed Article URL: http://dx.doi.org/10.1016/j.placenta.2005.08.004 |