**Basic Information**

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>GenBank Accession Number</th>
<th>Recommended Dilutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>10421-1-AP</td>
<td>BC034671</td>
<td>IHC: 1:200 - 1:200</td>
</tr>
</tbody>
</table>

**Size:** 30 μg/150 μl  
**Source:** Rabbit  
**Isotype:** IgG  
**Purification Method:** Affinity purification  
**Immunogen Catalog Number:** AG0672

**GenBank Accession Number:** BC034671  
**Full Name:** carcinoembryonic antigen-related cell adhesion molecule 5  
**Calculated MW:** 77 kDa  
**Observed MW:**

**Applications**

<table>
<thead>
<tr>
<th>Tested Applications</th>
<th>Positive Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHC, ELISA</td>
<td>IHC: human colon cancer tissue, human stomach cancer tissue, human appendicitis tissue, human lung cancer tissue</td>
</tr>
</tbody>
</table>

**Note-IHC:** suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

**Species Specificity:** human  
**Cited Applications:** chIP, IHC, WB

**Species Specificity:** human

**Background Information**

Carcinoembryonic antigen (CEA), also known as CEACAM5 or CD66e, is a cell surface glycoprotein belonging to the immunoglobulin superfamily, mainly serving as a cell adhesion molecule mediating intercellular contact by both homophilic and heterophilic binding (PMID: 21731662). CEA inhibits anoikis and plays a role in tumorigenesis and metastasis. CEA has been found to be overexpressed in a wide variety of human cancers, including colon, breast, and lung (PMID: 17167768). CEA is a tumor marker and is routinely exploited for diagnosis.

**Notable Publications**

<table>
<thead>
<tr>
<th>Author</th>
<th>PubMed ID</th>
<th>Journal</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ina Rudloff</td>
<td>31734267</td>
<td>Transl Res</td>
<td>WB</td>
</tr>
<tr>
<td>P-H Zhou</td>
<td>26005659</td>
<td>Gene Ther</td>
<td>IHC</td>
</tr>
<tr>
<td>Qingguo Li</td>
<td>26910083</td>
<td>Int J Biol Sci</td>
<td>WB, IHC, chIP</td>
</tr>
</tbody>
</table>

**Storage**

Store at -20°C. Stable for one year after shipment.  
Storage Buffer: PBS with 0.1% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage.

---

**For technical support and original validation data for this product please contact:**  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1 (312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**
Immunohistochemical analysis of paraffin-embedded human colon cancer using 10421-1-AP (CEA antibody) at dilution of 1:50 (under 10x lens)

Immunohistochemical analysis of paraffin-embedded human colon cancer using 10421-1-AP (CEA antibody) at dilution of 1:50 (under 40x lens)