Tenascin-C

Tenascin-C is an extracellular matrix (ECM) glycoprotein that is composed of 210-400 kDa subunits consisting of four domains.

One subunit has a TA domain at the N-terminal end, then an epidermal growth factor-like sequence domain (EGF-like domain), a fibronectin type III (FN III) repeat domain, and a fibrinogen-like domain at the C-terminal end. There is an alternatively spliced domain in the FN III domain, and it generates some types of variants of Tenascin-C.

The subunits form a trimer by twisting at the N-terminal coiled domain and form a hexamer by a disulfide bond, in tissue.

Assay Kits

<table>
<thead>
<tr>
<th>Product No.</th>
<th>Sample Type</th>
<th>Product Name</th>
<th>Measurement Range</th>
<th>Measuring samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>27751</td>
<td>H</td>
<td>Human Tenascin-C Large (FNIII-C) Assay Kit - IBL</td>
<td>0.38 ~ 24 ng/mL</td>
<td>Serum</td>
</tr>
<tr>
<td>27767</td>
<td>H/M/R</td>
<td>Tenascin-C Large (FNIII-B) Assay Kit - IBL</td>
<td>0.20 ~ 12.5 ng/mL</td>
<td>Serum</td>
</tr>
</tbody>
</table>

*1: more than x5 dilution is recommended.
*2: Plasma samples collected with EDTA, Sodium citrate or NaF showed somewhat lower value.
*3: x400 - x1600 dilution is recommended.
*4: cross-reacts with FCS in medium.

Antibodies

<table>
<thead>
<tr>
<th>Product No.</th>
<th>Sample Type</th>
<th>Product Name</th>
<th>Application</th>
<th>Size</th>
<th>Small size</th>
</tr>
</thead>
<tbody>
<tr>
<td>10337</td>
<td>H</td>
<td>Anti-Human Tenascin-C (EGF Like Domain) (4F10TT) Mouse IgG MoAb</td>
<td>WB (1μg/mL), IHC (5μg/mL) *1</td>
<td>100μg</td>
<td>10μg</td>
</tr>
<tr>
<td>10335</td>
<td>H</td>
<td>Anti-Human Tenascin-C (Domain B) (4C8MS) Mouse IgG MoAb</td>
<td>WB (5μg/mL), IHC (5μg/mL) *2</td>
<td>100μg</td>
<td>10μg</td>
</tr>
</tbody>
</table>

*1: Can be applied to formalin fixed paraffin embedded tissue with trypsin pre-treatment.
*2: Microwave pre-treatment is necessary.

Structure of Tenascin-C

Tenascin-C is an extracellular matrix (ECM) glycoprotein that is composed of 210-400 kDa subunits consisting of four domains.

One subunit has a TA domain at the N-terminal end, then an epidermal growth factor-like sequence domain (EGF-like domain), a fibronectin type III (FN III) repeat domain, and a fibrinogen-like domain at the C-terminal end. There is an alternatively spliced domain in the FN III domain, and it generates some types of variants of Tenascin-C.

The subunits form a trimer by twisting at the N-terminal coiled domain and form a hexamer by a disulfide bond, in tissue.

Distributed by

Immuno-Biological Laboratories Co., Ltd. Email: do-ibl@ibl-japan.co.jp URL: www.ibl-japan.co.jp
Two assay kits for measuring Tenascin-C are available. Each assay kit specifically detects FN III-B or FN III-C domain in FN III repeat and measures Tenascin-C high molecular weight variant (called as “Large”) including the subunit in which FN III-B or FN III-C domain respectively.

While low molecular weight variants of Tenascin-C are present in normal tissue, it is said that high molecular variants of Tenascin-C is expressed in various diseased tissue including cancers.

References