Recombinant human U1-snRNP C, his-tagged

**DAG4836 human(SNRPC)**

Lot. No. (See product label)

## PRODUCT INFORMATION

<table>
<thead>
<tr>
<th><strong>Product Overview</strong></th>
<th>Recombinant human U1-snRNP C, his-tagged</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antigen Description</strong></td>
<td>Small nuclear ribonucleoprotein complexes (abbreviated as U-snRNP) are essential for splicing of precursor mRNA molecules. U1-snRNP is the most abundant RNP particle in the nucleus and consists of one small uridylyate-rich RNA (U1 RNA) complexed with several proteins: the three 68/70 kDa A, C polypeptides are unique to the U1-snRNP particle, whereas 7 so-called Sm proteins (B/B', D1, D2, D3, E, F, G) form a core subparticle that is common to all U-snRNP complexes. Both the U1-specific proteins and the Sm core particle are targets of autoantibodies which classically have been called the RNP and RNP-Sm specificities, respectively. A clean diagnostic distinction of these specificities has been complicated by the biochemical difficulties of producing clean subparticle fractions from native sources. The use of single recombinant proteins as antigenic targets guarantees a much higher sensitivity and specificity and is the only way to determine RNP antibodies sensu stricto without the disturbing influence of Sm antigens; also with single U1 proteins antibodies will be detected which can be missed because of steric hindrance when using the RNP-Sm complex in an assay. Autoantibodies to U1-snRNP are present in 95% of patients with mixed connective tissue disease (MCTD) and 30% of patients with SLE. Antibodies against the 68/70-kDa protein are known to have a high clinical significance in MCTD patients. The &quot;68/70-kDa&quot; nomenclature of this protein refers to the fact that different splice variants of the protein are found in human cells.</td>
</tr>
</tbody>
</table>

### Description
Human U1-snRNP C protein component of the U1 small nuclear ribonucleoprotein particle. Recombinant antigen for solid (ELISA) and fluid phase diagnostic assays.

### Source
Recombinant. Expressed by recombinant baculovirus (Autographa californica multiple nuclear polyhedrosis virus; AcMNPV) infection of Spodoptera frugiperda Sf9 insect cells.

### Species
human

### Tag
his

### Isotype
IgG

### Molecular Mass
18,217 Dalton

### Purity
SDS-PAGE (purity > 90 %); Western blot with i: MCTD sera (Mixed Connective Tissue Disease); ii: monoclonal anti-hexa-His-tag antibody.

### Optimum pH
pH 10.2

### Applications
solid (ELISA) and fluid phase diagnostic assays.

### Quality Control Test
Standard ELISA test (checkerboard analysis of positive/negative sera panels, including CDC international reference sera).

## PACKAGING

### Storage
−70° to −80° C. Repeated freeze/thaw cycles should be avoided.

### Concentration
0.3–0.6 μg/ml (depending on the type of ELISA plate and coating buffer). Suitable for labeling of functional groups.

### Storage Buffer
neutral to slightly alkaline pH; due to purification work up under denaturing conditions presence of up to 0.02 % SDS (or similar detergents) may be required for maintaining solubility.

## ANTIGEN GENE INFORMATION

**Gene Name**
SNRPC small nuclear ribonucleoprotein polypeptide C [ Homo sapiens ]
<table>
<thead>
<tr>
<th><strong>Official Symbol</strong></th>
<th>SNRPC</th>
</tr>
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<tbody>
<tr>
<td><strong>Synonyms</strong></td>
<td>small nuclear ribonucleoprotein polypeptide C; 11157; Ensembl:ENSG00000124562; FLJ20302; U1 small nuclear ribonucleoprotein C; U1 snRNP C; U1 snRNP protein C; U1 small nuclear RNP specific C; SNRPC; U1C; Yhc1</td>
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<tr>
<td><strong>GeneID</strong></td>
<td>6631</td>
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<tr>
<td><strong>mRNA Refseq</strong></td>
<td>NM_003093.2</td>
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<tr>
<td><strong>Protein Refseq</strong></td>
<td>NP_003084.1</td>
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<td><strong>MIM</strong></td>
<td>603522</td>
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<tr>
<td><strong>UniProt ID</strong></td>
<td>P09234</td>
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<tr>
<td><strong>Chromosome Location</strong></td>
<td>6p21.31</td>
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<tr>
<td><strong>Pathway</strong></td>
<td>Spliceosome, organism-specific biosystem; Spliceosome, conserved biosystem; Spliceosome, U1-snRNP, organism-specific biosystem;</td>
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<td><strong>Function</strong></td>
<td>NOT U1 snRNA binding; protein binding; protein homodimerization activity; single-stranded RNA binding; zinc ion binding;</td>
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