



20150120ML

# Anti-Human CART (#7C11)

**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>101-M243</b>
Size:	100 µg
Lot. No.:	According to product label

**Preparation:** This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a mouse) immunized with human recombinant protein of CART.

## Target Background

<b>Synonyms (Target):</b>	CARTPT; CART
---------------------------	--------------

CART, also known as cocaine and amphetaminelated transcript, is a 10 kDa secreted polypeptide produced by neuronal cell types in a variety of locations. In human, the molecule is synthesized as a 116 amino acid (aa) precursor with a 27 aa signal sequence and an 89 aa mature segment. There are six Cterminal cysteines that form three intrachain disulfide bonds, and the potential exists for both sulfation and phosphorylation in the N terminal region. There are numerous monobasic and dibasic sites for enzyme cleavage, and multiple, presumably proteolytically generated short forms are known to exist. These include a 5K, 48 aa peptide (CART 42- 89), and a 4.3K, 40 aa peptide (CART 49-89). Human CART is 98% aa identical to both mouse and rat CART (189). Although CART suppresses feeding and increases pain tolerance, there would appear to be differences between the various forms of CART on other functions. In addition, anatomical location is associated with differing lengths of CART. For example, 89 aa and 79 aa forms are found in the adrenal, while 48 aa and 44 aa forms are found in the hypothalamus.

## Database References Target

<b>Protein RefSeq:</b>	NP_004282
<b>Uniprot ID:</b>	Q16568
<b>mRNA RefSeq:</b>	NM_004291

## Product Specifications

<b>Host</b>	Mouse
<b>Reactivity against</b>	Human
<b>Clonality</b>	Monoclonal Antibody
<b>Clone</b>	(#7C11)
<b>Isotype</b>	IgG2
<b>Purification</b>	Protein G chromatography
<b>Antigen</b>	recombinant human CART
<b>Formulation</b>	lyophilized
<b>Reconstitution buffer</b>	PBS (sterile)

**Reconstitution:** Reconstitute the antibody with 200 µl sterile PBS and the final concentration is 500 µg/ml.

**Stability:** Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

**Remarks:** This antibody was selected for its ability to detect human CART protein.

**AVOID REPEATED FREEZE AND THAW CYCLES!**

## Applications

The antibody can be used within the following applications:

WB, IHC

### Recommended usage:

Western Blot: 1:500 - 1:1000

IHC (frozen): 1:20 - 1 1:100

**NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!**