Synaptic Systems

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Monocarboxylate transporter 1

Cat.No. 356 003; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl H_2O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	**WB**: 1 : 1000 (AP staining) **IP**: not tested yet **ICC**: 1 : 500 **IHC**: 1 : 500 **IHC-P/FFPE**: 1 : 500
Immunogen	Synthetic peptide corresponding to AA 483 to 493 from mouse MCT1 (UniProt Id: P53986)
Reactivity	Reacts with: rat (P53987), mouse (P53986). Other species not tested yet.
Specificity	Specific for MCT 1.
matching control	356-0P

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

The proton-linked transport of monocarboxylates across the plasma membrane plays a critical role in the metabolism and pH regulation of most cells. Fourteen different monocarboxylic acid transporters (MCTs) have been identified, so far. Only four of them (MCT 1-4) have been shown to actively transport the monocarboxylates pyruvate and lactate across the cell membrane.
MCT 1, also referrred to as **Slc16 a1**, and MCT 2 show differential expression in astrocyte subpopulations and blood vessels in the mammalian brain.

Selected General References

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