

Datasheet for MS-T004**Mouse Brain****Overview**

Description:	Mouse Brain - MS-T004
Item No.:	MS-T004
Size:	1 Each
Applications:	Other, WB
Origin:	Mouse

Product Details

Background:	Mouse brain tissue can be used as a source of raw materials or prepared as a lysate for use in western blotting, immunohistochemistry, electron microscopy or other uses in cell biology, immunology or biochemistry.
Synonyms:	Isolated mouse brain tissue
Species of Origin:	Mouse

Application Details

Suggested Applications:	Other, WB (Based on references)
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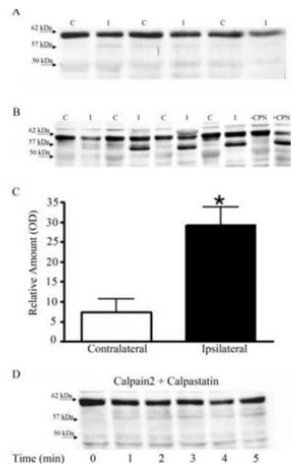
Formulation

Physical State:	Tissue
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Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store tissue at -20° C or colder prior to use.
Expiration:	No expiration date is given for this product if properly stored.

Images

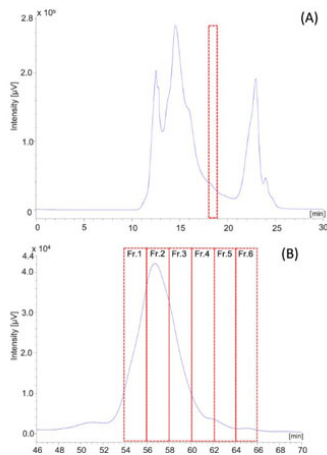


Western Blot

MetAP2 is cleaved by calpain in a rat middle cerebral arterial occlusion (MCAO) stroke model(A) Tissue harvested at 1 hour post-reperfusion did not show a difference in the formation of a proteolytic fragment between contralateral (C) and ipsilateral (I) brain. (B) Western blotting of MCAO brain tissue harvested 24 hours post-ischemia is shown in lanes 1-8. Lanes 9 and 10 show the in vitro digestion of contralateral MCAO brain sample in the presence (+CPN) or absence (-CPN) of calpain 2. A 57 kDa fragment is clearly observed in 3 of 4 samples (I) that runs at an identical molecular weight on SDS-PAGE as calpain-treated brain homogenates (+CPN). (C) A significant increase in the novel 57 kDa calpain-mediated MetAP2 cleavage product was clear at 24 hours post-ischemia (* = p=0.02 by Students t-test, two-tailed, paired, n=4). (D) Treatment of contralateral MCAO brain samples in the presence of calpain and calpastatin indicates that the 57kDa fragment produced by calpain 2 is blocked by the only known endogenous calpain inhibitor, calpastatin. Homogenate was prepared using commercially available mouse brain (p/n MS-T004). Figure 3. PMID: 23295187.

Figure

Gel-filtration chromatograms of large-scale GFC of the crude peptide extracts (A) and the subsequent triple-analytical GFC (B) from Mouse brain (p/n MS-T004). Fig 4. PMID: 33759292.



References

- Yamagaki, T et al. Amidation/non-amidation top-down analysis of endogenous neuropeptide Y in brain tissue by nano flow liquid chromatography orbitrap Fourier transform mass spectrometry. *Journal of Mass Spectrometry : Jms* (2021)
- Clinkinbeard, T et al. Calpain cleaves methionine aminopeptidase-2 in a rat model of ischemia/reperfusion. *Brain Research* (2013)

Disclaimer

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