

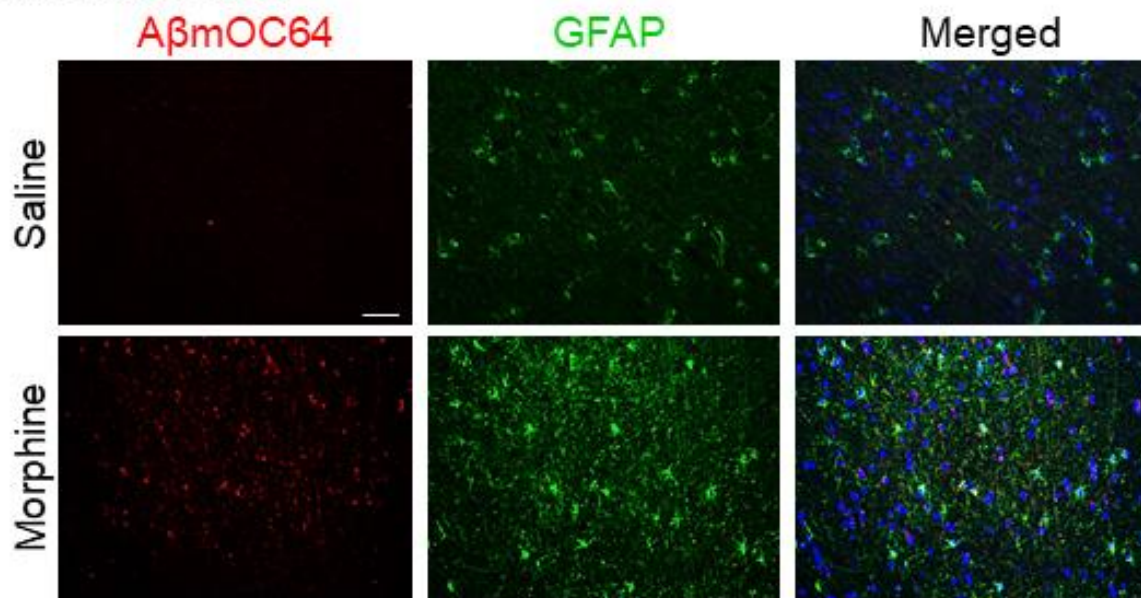
SUPPLEMENTARY DATA

**Astrocytes & Astrocyte derived Extracellular Vesicles in
Morphine Induced Amyloidopathy: Implications for
Cognitive Deficits in Opiate Abusers**

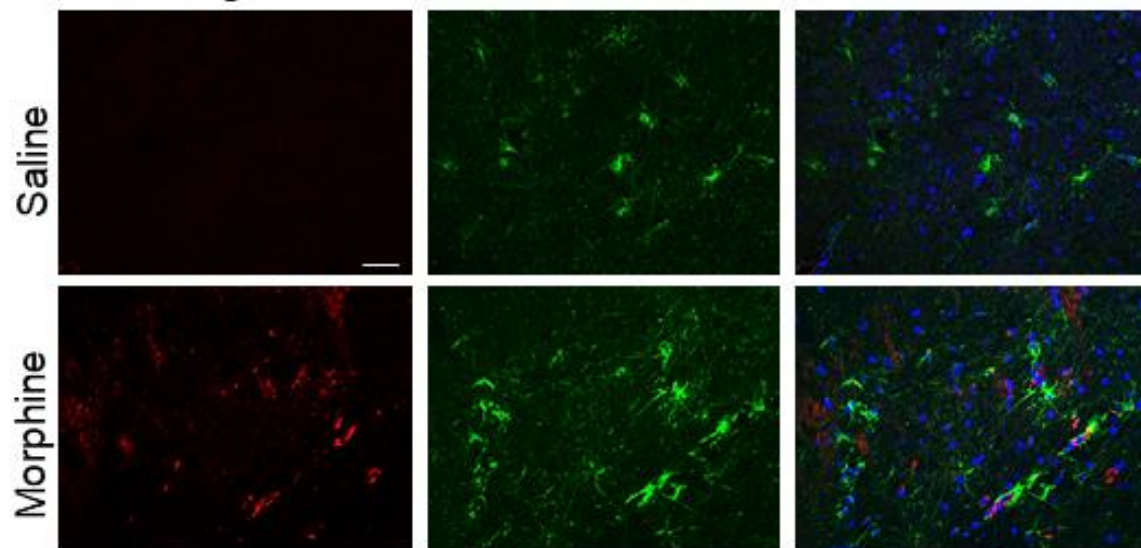
Susmita Sil*, Seema Singh, Divya T. Chemparathy, Ernest T. Chivero, Lila Gordon, Shilpa Buch*

SUPPLEMENTARY DATA

A. Frontal cortex



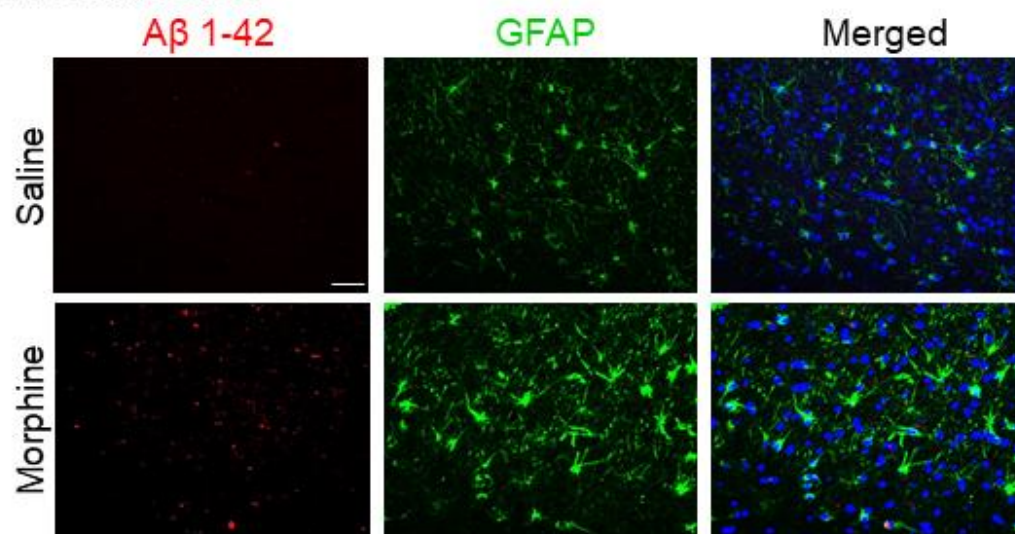
B. Basal Ganglia



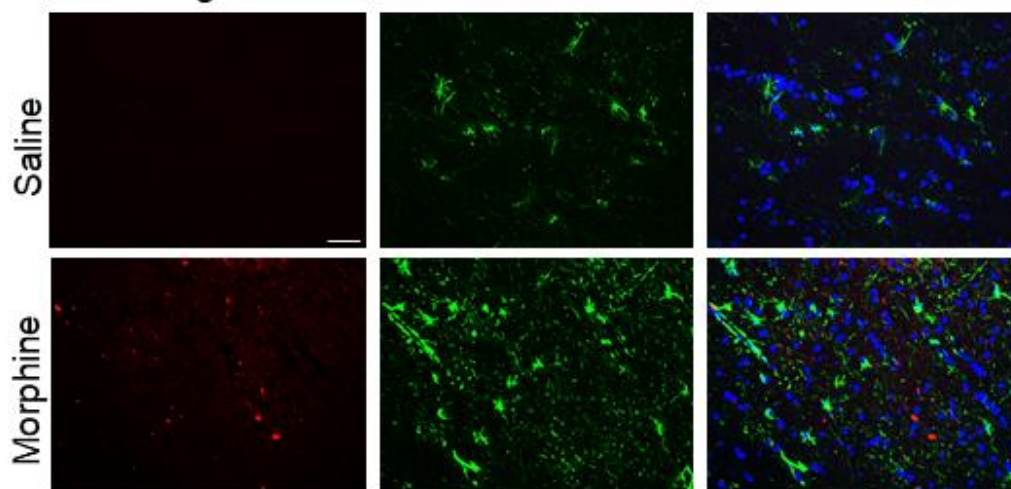
Supplementary Figure 1. Expression of A β mOC64 in the FC and BG of morphine-dependent macaques. Representative immunohistochemistry photomicrographs showing differential expression of A β mOC64 protein in GFAP+ astrocytes in morphine dependent macaque FCs (A) and BGs (B). Scale bar, 10 μ m. $n=4$ macaques/ group. Abbreviations: A β - amyloid beta, GFAP- glial fibrillary protein.

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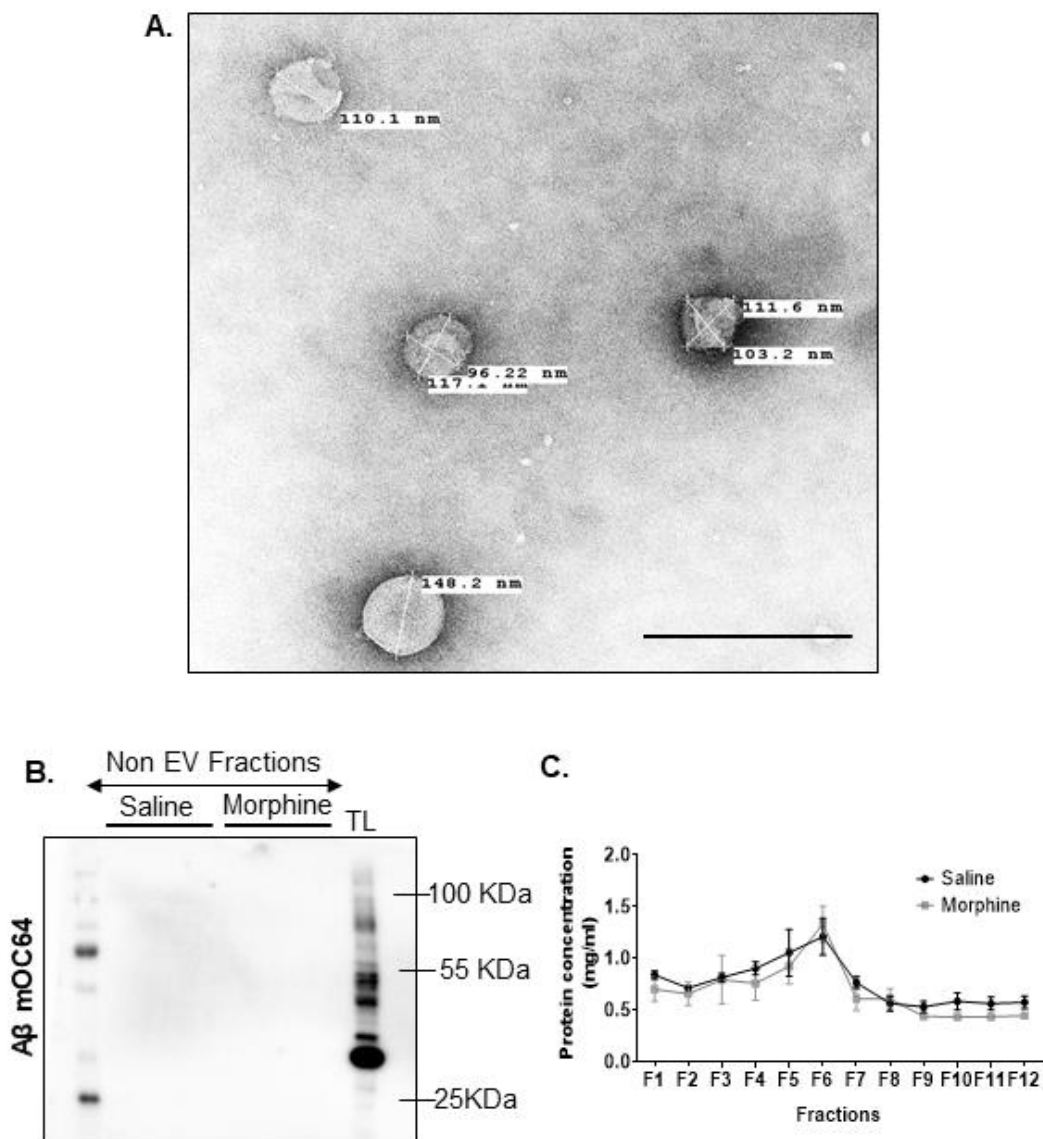


B. Basal Ganglia



Supplementary Figure 2. Expression of A β 1-42 in the FC of morphine-dependent macaques. Representative immunohistochemistry photomicrographs showing differential expression of A β mOC64 protein in GFAP⁺ astrocytes in morphine dependent macaque FCs (A) and BGs (B). Scale bar, 10 μ m. $n=4$ macaques/ group. Abbreviations: A β -amyloid beta, GFAP- glial fibrillary acidic protein.

SUPPLEMENTARY DATA



Supplementary Figure 3. Characterization of brain-derived EVs from macaques. (A) Topographic profiling of F4-F7 EVs using transmission electron microscopy (TEM) under tapping mode revealed a heterogeneous population of spherical particles. (B) Representative western blot images for A β mOC64 from non-EV fractions from saline and morphine dependent macaques. (C) Protein concentration in EVs from F1-F12 assessed by ZetaView. $n=4$ macaques/group.