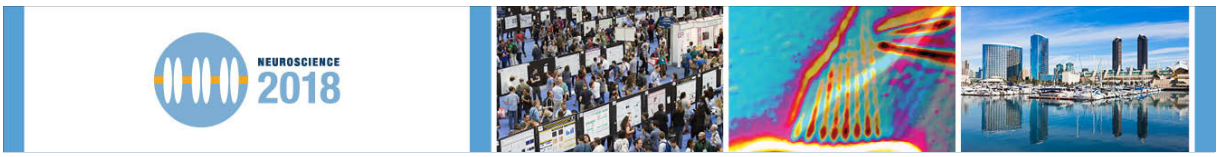

(https://www.abstractsonline.com/pp8/#!/4649)

Session 381 - Neurotoxicity, Inflammation, and Neuroprotection: Mechanisms of Neurodegeneration II

Add to Itinerary

381.02 / M1 - The polyglutamine protein FAM171B localizes to neuronal cytoplasm

November 5, 2018, 1:00 PM - 5:00 PM	SDCC Halls B-H

Presenter at Poster
Mon, Nov. 5, 2018, 2:00 PM - 3:00 PM

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Authors
D. RAJAGURU, M. BAUER, D. S. SHARLIN, *G. M. GOELLNER;
Biol., Minnesota State Univ- Mankato, Mankato, MN

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Abstract
Expansion mutation within polyglutamine (polyQ) tract proteins is known to underlie a number of severe neurodegenerative disorders such as Huntington's Disease and Spinocerebellar Ataxia. Using a bioinformatics approach, we have identified a novel protein, FAM171B, that contains a stretch of 14 consecutive glutamines. Using ***in situ*** hybridization and immunohistochemistry experiments, our data strongly suggests that FAM171B is widely expressed in the brain with abundant expression in the hippocampus, cortex, and cerebellum. To begin elucidating FAM171B sub-cellular location we are using confocal fluorescence imaging of GFP-fusion tagged FAM171B and anti-FAM171B antibodies ***in vitro***. Our findings indicate that FAM171B displays a punctate/vesicular staining pattern throughout the cytoplasm of human glioblastoma tissue culture cells and primary mouse cortical neurons. FAM171B localization is particularly enriched in the peri-nuclear region and adjacent to the plasma membrane. Current studies are utilizing organelle specific markers to verify sub-cellular locale and live-cell imaging to assay whether FAM171B may traffic between intracellular compartments.

Abstract Citation