Gamma-synuclein

UniProt

<u>Function</u>: Plays a role in neurofilament network integrity. May be involved in modulating axonal architecture during development and in the adult. In vitro, increases the susceptibility of neurofilament-H to calcium-dependent proteases (By similarity). May also function in modulating the keratin network in skin. Activates the MAPK and Elk-1 signal transduction pathway (By similarity).

<u>Subcellular location:</u> Cytoplasm; Perinuclear region. Cytoplasm; Cytoskeleton; Centrosome. Cytoplasm; Cytoskeleton; Spindle. NOTE: Associated with centrosomes in several interphase cells. In mitotic cells, localized to the poles of the spindle.

<u>Tissue specificity:</u> Highly expressed in brain, particularly in the substantia nigra. Also expressed in the corpus callosum, heart, skeletal muscle, ovary, testis, colon and spleen. Weak expression in pancreas, kidney and lung.

Two antibodies: SNCG-1 and SNCG-2 were tested. Both antibodies were approved for IHC. SNCG-1 was selected for full protein profiling.



SNCG-2 (CAB040582)

Immunohistochemistry

IHC protocol: HIER pH 6, Dilution 1:450 **IHC test staining:** Cytoplasmic staining in CNS, vessels and smooth muscle.



Western blot

WB Size markers (kDa): 250, 130, 95, 72, 55, 36, 28, 17, 11 **WB Lanes:** Marker(1), RT-4(2), U251 MG(3), Plasma(4), Liver(5), Tonsil(6)

WB Target weight (kDa): 13, 8

WB Validation: Non-supportive - Weak band of predicted size but with additional bands of higher intensity also present.