**BACKGROUND**

The Wnt gene family encodes secreted signaling molecules that bind to frizzled receptors and influence oncogenesis and developmental processes, including regulation of cell fate and patterning during embryogenesis. The Wnt family has two functional classes, according to their biological activities: Wnts that signal through a Wnt-1/wingless pathway by stabilizing cytoplasmic β-catenin; and Wnts that stimulate intracellular Ca²⁺ release and activate two kinases, CaMKII and PKC, in a G protein-dependent manner. Wnt-3a is an intercellular signaling molecule that mediates cytoskeletal reorganization and regulates hippocampal development. Human Wnt-3a is 96% homologous to mouse Wnt-3a protein and 84% homologous to human Wnt-3 protein. The human Wnt-3a gene clusters with the Wnt-14 gene at chromosome 1q42.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: WNT3A (human) mapping to 1q42; Wnt3a (mouse) mapping to 11 B1.3.

**SOURCE**

Wnt-3a (YY-7) is a rat monoclonal antibody raised against full length recombinant Wnt-3a of mouse origin.

**PRODUCT**

Each vial contains 100 µg IgG₂α in 1.0 ml of PBS with < 0.1% sodium azide and protein stabilizer.

Available azide-free for neutralization, sc-80457 L, 100 µg/0.1 ml.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

Wnt-3a (YY-7) is recommended for detection of Wnt-3a of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with Wnt-1, Wnt-4 or Wnt-5a.

Suitable for use as control antibody for Wnt-3a shRNA Plasmid (m): sc-41109, Wnt-3a shRNA Plasmid (m): sc-41109-SH and Wnt-3a shRNA (m) Lentiviral Particles: sc-41109-V.

Molecular Weight of Wnt-3a: 39 kDa.

Positive Controls: Wnt-3a (m): 293 Lysate: sc-179755 or A549 cell lysate: sc-2413.

**DATA**

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.