

Progerin antibody (mAb)

Catalog Nos: 39965, 39966

RRID: AB_2793412 Clone: 13A4 Isotype: IgG1, k Application(s): ICC, IF, WB Reactivity: Human Quantities: 100 µg, 10 µg Purification: Protein G Chromatography Host: Mouse Concentration: 1 µg/µl Molecular Weight: 69 kDa

Background: Progerin is a 614 amino acid protein related to the Lamin A protein and is involved in Hutchinson-Gilford progeria syndrome (HGPS), a rare genetic disorder characterized by features reminiscent of severe premature aging. Progerin is most often generated by a point mutation in the gene that codes for lamin A and C. Nuclear lamins are intermediate filament proteins that are the major structural component of the nuclear lamina on the inner surface of the nuclear envelope. The mutation of the lamin A gene that leads to preogerin results in the creation of a cryptic splice site in lamin A mRNA, resulting in the deletion of 50 amino acids in the C-terminal region the lamin A protein. The 50 amino acid deletion removes a conserved proteolytic cleavage site and therefore Progerin retains its C-terminal 15 amino acids and is permanently farnesylated. Although it can enter the nucleus and associate with the nuclear envelope, it cannot incorporate normally into the nuclear lamina. HGPS is caused by the toxic accumulation of Progerin, which acts to deregulate mitosis and DNA damage signaling, leading to premature senescence and cell death.

Immunogen: This Progerin antibody was raised against a peptide corresponding to amino acids 604-611 of human Progerin.

Buffer: Purified IgG in 70 mM Tris (pH 8), 105 mM NaCl, 31 mM glycine, 0.07 mM EDTA, 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.

Application Key: ChIP = Chromatin Immunoprecipitation; FACS = Flow Cytometry; IF = Immunofluorescence; IHC = Immunohistochemistry; IP = Immunoprecipitation; WB = Western Blot