Monoclonal anti-human Growth Hormone antibody (clone g3H5)

Cat. No. AGH0401

Immunogen: Recombinant human Growth hormone (27-217aa) purified from E. coli

NCBI Accession No.: NP_000506

Isotype: Mouse IgG\textsubscript{2b} heavy chain and \(\kappa\) light chain

Clone: Anti-human Growth hormone mAb, clone g3H5, is derived from hybridization of mouse SP2/O myeloma cells with spleen cells from BALB/c mice immunized with a recombinant human Growth hormone protein.

Description: Human growth hormone (hGH, somatotropin), a protein hormone from the anterior lobe of the pituitary gland, comprises a single polypeptide chain of 191 amino acid residues. The 20KDa variant form of human growth hormone (20KDa hGH) presents in extracts from pituitary glands and it differs from the major form of hGH (22KDa, 191 amino acid) by the deletion of amino acid residues 32-46. The growth hormone amino acid sequence varies considerably between species, and non-primate growth hormones have little activity in man. Main functions of hGH and 20KDa hGH are the stimulation of somatic and bone growth, as well as an increase in the size and mass of organs and tissues.

Concentration: 1 mg/ml

Form: Liquid. In Phosphate-Buffered Saline (pH 7.4) with 0.02\% Sodium Azide, 10\% Glycerol

Storage: Can be stored at +4C. For long term storage, aliquot and store at -20C. Avoid repeated freezing and thawing cycles.

Usage: The antibody has been tested by ELISA, Western blot analysis and Neutralization to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

Application: ELISA, WB, Neutralization
Western blot analysis
The Recombinant protein (50ng) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human Growth hormone antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

Lane 1.: Recombinant hGH (21-217aa)
Lane 2.: 20kDa hGH (27-202aa)

Neutralization
Measured by its ability to neutralize Growth hormone induced proliferation in Nb2-11 rat lymphoma cells. The neutralization ED50 is less or equal to 2ug/ml in the presence recombinant protein human Growth hormone.

General references