

Product Sheet

WNT-5a, human recombinant

- Catalog #** W5a-H-100
- Synonyms** Wingless-type MMTV (mouse mammary tumor virus) integration site family member 5a
- Description** WNT-5a belongs to the class of WNT proteins that activate the “non-canonical” pathway. The predicted size of human WNT-5a is a monomeric protein containing 357 amino acid residues. Due to glycosylation, it migrates at an apparent molecular weight of ~45 kDa on SDS-PAGE under non-reducing conditions. StemRD’s product is expressed from a human cell line in animal-free medium, and purified with a proprietary process that is distinct from the published method.
- Formulation** Lyophilized in sterile filtered solution of PBS with 2% CHAPS
- Reconstitution** Before reconstitution, we recommend a brief spin to drive down any material dislodged from the bottom of the tube. The lyophilized protein should be reconstituted in sterile H₂O to a concentration of 100 ng/uL. Because of the hydrophobic nature of this protein, further dilutions should be made in buffer or medium containing carrier proteins, such as albumin or serum.
- Stability** The lyophilized protein is stable for at least 6 months if stored at -80 degree C. Reconstituted protein is stable for at least 2 weeks at 4 degree C, but should be stored in aliquots at -80 degree C for longer term. Avoid repeated freeze/thaw.
- Purity** Greater than 85% as determined by SDS-PAGE and HPLC analysis
- Biological Activity** The activity was determined by using a TCF reporter gene assay in HEK293 cells co-transfected with Frizzled-4 and LRP-5. WNT-5a activates (instead of inhibits) the TCF reporter gene in this assay (Milkels AJ, et al., PLoS Biol, 4:e115, 2006). This activation mode is utilized because activation assays are generally more reliable than inhibition assays, as they are less prone to any non-specific inhibitory contamination in the preparation.
- Country of Origin** USA

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