

Product Sheet

WNT-5a, human recombinant

Catalog #	W5a-H-005; W5a-H-025; W5a-H-100
Synonyms	Wingless-type MMTV integration site family member 5a, human
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 H ₂ O 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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