## **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 1% 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<sub>2</sub>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 75% as determined by SDS-PAGE and HPLC analysis

**Biological Activity** The activity was determined by using a TCF reporter gene assay in 293

cells 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).

**Country of Origin** USA

For Research Use Only. Not for Use in Humans.

