Product Sheet

WNT-5a, mouse recombinant

Catalog # W5a-M-005; W5a-M-025; W5a-M-100

Synonyms Wingless-type MMTV integration site family member 5a, mouse

Description WNT-5a belongs to the class of WNT proteins that activate the "non-

canonical" pathway. The predicted size of mouse WNT-5a is a monomeric protein containing 356 amino acid residues. Due to glycosylation, it migrates at an apparent molecular weight of ~45 kDa by SDS-PAGE analysis under non-reducing conditions. StemRD's product is expressed from a mouse cell line, 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_2O 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 1 year if stored at -80 degree C.

Reconstituted protein is stable for at least 1 month at 4 degree C, but should be stored in aliquots at -80 degree C for longer term. Avoid repeated freeze

and 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 293

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

For Research Use Only. Not for Use in Humans.

