FZD3 Protein, Human (Cell-Free, His)

Cat. No.:	HY-P702283
Synonyms:	Frizzled-3; Fz-3; hFz3
Species:	Human
Source:	E. coli Cell-free
Accession:	Q9NPG1 (H23-A666)
Gene ID:	7976
Molecular Weight:	75.3 kDa

PROPERTIES

AA Sequence	H S L F S C E P I T L R M C Q D L P Y N T T F M P N L L N H Y D Q Q T A A L A M E P F H P M V N L D C S R D F R P F L C A L Y A P I C M E Y G R V T L P C R R L C Q R A Y S E C S K L M E M F G V P W P E D M E C S R F P D C D E P Y P R L V D L N L A G E P T E G A P V A V Q R D Y G F W C P R E L K I D P D L G Y S F L H V R D C S P P C P N M Y F R R E E L S F A R Y F I G L I S I I C L S A T L F T F L T F L I D V T R F R Y P E R P I I F Y A V C Y M M V S L I F F I G F L L E D R V A C N A S I P A Q Y K A S T V T Q G S H N K A C T M L F M I L Y F F T M A G S V W W V I L T I T W F L A A V P K W G S E A I E K K A L L F H A S A W G I P G T L T I I L L A M N K I E G D N I S G V C F V G L Y D V D A L R Y F V L A P L C L Y V V V G V S L L L A G I I S L N R V R I E I P L E K E N Q D K L V K F M I R I G V F S I L Y L V P L L V V I G C Y F Y E Q A Y R G I W E T T W I Q E R C R E Y H I P C P Y Q V T Q M S R P D L I L F L M K Y L M A L I V G I P S V F W V G S K K T C F E W A S F F H G R R K K E I V N E S R Q V L Q E P D F A Q S L L R D P N T P I I R K S R G T S T Q G T S T H A S S T Q L A M V D D Q R S K A G S I H S K V S S Y H G S L H R S R D G R Y T P C S Y R G M E E R L P H G S M S R L T D H S R H S S S H R L N E Q S R H S S I R D L S N N P M T H I T H G T S M N R V I E E D G T S A
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.22 μm filtered solution of Tris/PBS-based buffer, 6% Trehalose, pH 8.0.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O. For long term storage it is recommended to add 5-50% of glycerol (final concentration). Our default final concentration of glycerol is 50%. Customers could use it as reference.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	FZD3, serving as a receptor for Wnt proteins, primarily engages in the beta-catenin canonical signaling pathway, orchestrating the activation of disheveled proteins, inhibition of GSK-3 kinase, nuclear accumulation of beta-catenin, and induction of Wnt target genes. A secondary signaling pathway involving PKC and calcium fluxes, observed in certain family members, raises questions about its distinct nature and potential integration with the canonical pathway, given the crucial role of PKC in Wnt-mediated GSK-3 kinase inactivation. Interactions with G-proteins are integral to both pathways. Wnt5A activation stimulates PKC activity through a G-protein-dependent mechanism. FZD3 is implicated in transducing polarity information during tissue morphogenesis and differentiated tissues, playing a critical role in controlling early axon growth and guidance processes. It is essential for the development of major fiber tracts in the central nervous system and regulates axon growth in specific populations of cranial and spinal motor neurons. Additionally, FZD3 is involved in the migration of cranial neural crest cells and contributes to the transmission of sensory information. It collaborates with FZD6 in neural tube closure and participates in establishing planar cell polarity, particularly in orienting stereocilia bundles in auditory and vestibular sensory cells. Furthermore, FZD3 promotes neurogenesis by maintaining sympathetic neuroblasts within the cell cycle through a beta-catenin-dependent mechanism. Interactions with VANGL2 further underscore its multifaceted role in cellular processes.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA