

Flogen[®] Recombinant Human Syndecan-4, His(rHuSYND4, His)

- Catalog Number:** PGR0601-008H
- Source:** *Escherichia coli*.
- Molecular Weight:** Approximately 15.4 kDa, a single non-glycosylated polypeptide chain containing 140 amino acids with 6 × His at C-terminus.
- Quantity:** 10µg/50µg/1000µg
- AA Sequence:** MASSIRETEV IDPQDLLEGR YFSGALPDDE DVVGGPGQESD DFELSGSGDL
DDLEDSMIGP EVVHPLVPLD NHIPERAGSG SQVPTEPKKL EKNEVIPKRI
SPVEESEDVS NKVSMSSVQ GSNIFERTEV LALEHHHHHH
- Purity:** > 90 % by SDS-PAGE and HPLC analyses.
- Biological Activity:** Fully biologically active when compared to standard. The specific activity is determined by binding ability in a functional ELISA. Immobilized rHuSYND4 at 500 ng/ml (100 µl/well) can bind rHubFGF with a linear range of 0.1-10 ng/ml.
- Appearance:** Sterile Filtered White lyophilized (freeze-dried) powder.
- Formulation:** Lyophilized from a 0.2 m filtered concentrated solution in 20 mM PB, pH 7.4.
- Endotoxin:** Less than 1 EU/ g of rHuSYND4, His as determined by LAL method.
- Reconstitution:** We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
- Storage:** This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. **Avoid repeated freeze/thaw cycles.**
- Usage:** For research, laboratory or further evaluation purposes. **NOT FOR HUMAN USE.**

Human Syndecan-4

Syndecan-4 (SYND4) encoded by the SDC-4 gene in humans, has a molecular weight of ~20 kDa. It is one of the four vertebrate syndecans which belong to the syndecan family of Type 1 transmembrane proteins and capable of carrying heparin sulfate (HS) and chondroitin sulfate glycosaminoglycans. Syndecans are the best-characterized plasma membrane proteoglycans with two conserved cytoplasmic domains and divergent extracellular portions, except for HS attachment sites. SYND4 is the most similar to SYND2, but is more universally expressed and is found in virtually every cell type. Expression can be upregulated by TGFβ2 and in response to mechanical stress in smooth muscle, wound healing, arterial injury or acute myocardial infarction, probably in response to at least one inflammatory mediator. SYND4 has more widespread distribution than other syndecans and it is the only syndecan that has been found consistently in focal adhesions. Human SYND4 ECD shares approximately 79 %, 78 % and 81% a.a. identity with mouse, rat and porcine SYND4 ECD, respectively.