

## USH1C Protein, Human (His)

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| <b>Cat. No.:</b>         | HY-P76966  |
| <b>Synonyms:</b>         | Harmonin; Antigen NY-CO-38/NY-CO-37; Protein PDZ-73; AIE75 |
| <b>Species:</b>          | Human  |
| <b>Source:</b>           | E. coli  |
| <b>Accession:</b>        | Q9Y6N9 (M1-F552)   |
| <b>Gene ID:</b>          | 10083  |
| <b>Molecular Weight:</b> | Approximately 70 kDa                                       |

### PROPERTIES

|                                |  |
|--------------------------------|--|
| <b>AA Sequence</b>             | <pre> MDR K V A R E F R   H K V D F L I E N D   A E K D Y L Y D V L   R M Y H Q T M D V A V L V G D L K L V I   N E P S R L P L F D   A I R P L I P L K H   Q V E Y D Q L T P R R S R K L K E V R L   D R L H P E G L G L   S V R G G L E F G C   G L F I S H L I K G G Q A D S V G L Q V   G D E I V R I N G Y   S I S S C T H E E V   I N L I R T K K T V S I K V R H I G L I   P V K S S P D E P L   T W Q Y V D Q F V S   E S G G V R G S L G S P G N R E N K E K   K V F I S L V G S R   G L G C S I S S G P   I Q K P G I F I S H V K P G S L S A E V   G L E I G D Q I V E   V N G V D F S N L D   H K E A V N V L K S S R S L T I S I V A   A A G R E L F M T D   R E R L A E A R Q R   E L Q R Q E L L M Q K R L A M E S N K I   L Q E Q Q E M E R Q   R R K E I A Q K A A   E E N E R Y R K E M E Q I V E E E E K F   K K Q W E E D W G S   K E Q L L L P K T I   T A E V H P V P L R K P K Y D Q G V E P   E L E P A D D L D G   G T E E Q G E Q D F   R K Y E E G F D P Y S M F T P E Q I M G   K D V R L L R I K K   E G S L D L A L E G   G V D S P I G K V V V S A V Y E R G A A   E R H G G I V K G D   E I M A I N G K I V   T D Y T L A E A E A A L Q K A W N Q G G   D W I D L V V A V C   P P K E Y D D E L T   F F           </pre> |
| <b>Biological Activity</b>     | Data is not available.   |
| <b>Appearance</b>              | Solution.  |
| <b>Formulation</b>             | Supplied as a 0.2 µm filtered solution of 50 mM Tris, 300 mM NaCl, pH 7.4, 20% Glycerol.   |
| <b>Endotoxin Level</b>         | <1 EU/µg, determined by LAL method.  |
| <b>Reconstitution</b>          | N/A.   |
| <b>Storage &amp; Stability</b> | Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.   |
| <b>Shipping</b>                | Shipping with dry ice.   |

## DESCRIPTION

### Background

USH1C, an anchoring and scaffolding protein, plays a crucial role in the mechanotransduction process within cochlear hair cells, forming an intricate network with USH1G, CDH23, and MYO7A. It is essential for the normal development and maintenance of cochlear hair cell bundles. As a component of the intermicrovillar adhesion complex (IMAC), USH1C contributes to brush border differentiation, exerting control over microvilli organization and length. Its regulatory significance is evident in the assembly of the complex, where it recruits CDHR2, CDHR5, and MYO7B to the tips of microvilli. USH1C participates in various complexes, including IMAC and the complex composed of USH1C, USH1G, and MYO7A. Its interactions extend to F-actin, USH2A, SLC4A7, USHBP1, CDH23, USH1G, MYO7B, CDHR2, CDHR5, and ANKS4B, emphasizing its multifaceted role in cellular processes and protein associations.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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