

PRODUCT INFORMATION

Target	SHH
Synonyms	Sonic Hedgehog Protein;SHH;HHG-1
Description	Recombinant Human Sonic Hedgehog is produced by our Mammalian expression system and the target gene encoding Cys24-Gly197 is expressed with a 6His tag at the C-terminus.
Delivery	In Stock
Uniprot ID	Q15465
Expression Host	HEK293
Tag	C-6×His Tag
Molecular Characterization	Not available
Molecular Weight	20.4 KDa
Purity	Greater than 95% as determined by reducing SDS-PAGE.
Formulation & Reconstitution	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
Storage & Shipping	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.
Background	Sonic Hedgehog Homolog (SHH) belongs to a three-protein family called hedgehog. The other two family members are Indian Hedgehog (IHH) and Desert Hedgehog (DHH). Hedgehog proteins are key signaling molecules in embryonic development. SHH is expressed in various embryonic tissues and plays critical roles in regulating the patterning of many systems, such as limbs and brain. SHH also plays an important role in adult, including the division of adult stem cells and the development of certain cancers and other diseases. Human SHH is expressed as a 45kDa precursor, and undergoes a series of processing during secretion. After the removal of the signal peptide, a protease within the C-terminal domain catalyzes the cleavage of SHH into a 20 kDa N-terminal signaling domain (SHH-N) and a 25 kDa C-terminal domain (SHH-C). SHH-N has the “all signaling” capability. SHH-N binds to the 12 pass transmembrane protein Patched (Ptc) on cell surface, which releases the repression of the activity of Smoothened (Smo), a G-protein coupled receptor, by Ptc.
Usage	Research use only
Conjugate	Unconjugated



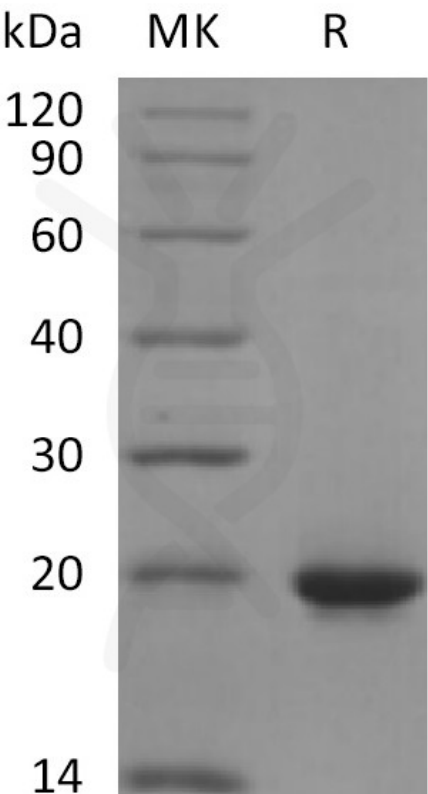


Figure 1. Greater than 95% as determined by reducing SDS-PAGE.

