

## Product Datasheet

### Recombinant Shh, Mouse (CHO-expressed) (orb1494667)

<b>Description</b>	Members of the Hedgehog (Hh) family are highly conserved proteins which are widely represented throughout the animal kingdom. The three known mammalian Hh proteins, Sonic (Shh), Desert (Dhh) and Indian (Ihh) are structurally related and share a high degree of amino-acid sequence identity (e.g., Shh and Ihh are 93% identical). The biologically active form of Hh molecules is obtained by autocatalytic cleavage of their precursor proteins and corresponds to approximately the N-terminal one half of the precursor molecule. Although Hh proteins have unique expression patterns and distinct biological roles within their respective regions of secretion, they use the same signaling pathway and can substitute for each other in experimental systems. Recombinant E.coli derived Human Sonic HedgeHog is a 20.0 kDa protein consisting of 176 amino acid residues, including an N-terminal Ile-Val-Ile sequence substituted for the natural occurring chemically modified Cys residue.
<b>Endotoxins</b>	< 0.2 EU/μg, determined by LAL method.
<b>Preservatives</b>	Lyophilized after extensive dialysis against PBS.
<b>Form/Appearance</b>	Lyophilized after extensive dialysis against PBS.
<b>Storage</b>	Lyophilized recombinant Murine Sonic Hedgehog (SHH) remains stable up to 6 months at -80°C from date of receipt. Upon reconstitution, rmSHH should be stable up to 1 week at 4°C or up to 2 months at -20°C.
<b>Note</b>	For research use only
<b>Application notes</b>	Reconstituted in ddH <sub>2</sub> O or PBS at 100 μg/ml.
<b>Protein Sequence</b>	CGPGRGFGKRRHPKLLTPLAYKQFIPNVAEKTLGASGRYEGKITRNSERFKELTPNYPDIIF KDEENTGADRLMTQRCK DKLNALAISVMNQWPGVKLRVTEGWDEDGHHSEESLHYEGRAVDITTSRDRSKYGMLA RLAVEAGFDWVYYESKAHIHC SVKAENSVAAKSGG
<b>Purity</b>	> 95% as analyzed by SDS-PAGE and HPLC.

**Biorbyt Ltd.**

7 Signet Court, Swann's Road,  
Cambridge, CB5 8LA, United Kingdom  
Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+44 \(0\) 1223 859-353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)

**Biorbyt LLC.**

68 TW Alexander Drive,  
Durham, NC, 27713, United States  
Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+1 \(415\) 906-5211](tel:+1(415)9065211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)

<b>Source</b>	CHO
<b>MW</b>	20 kDa, observed by non-reducing SDS-PAGE.
<b>Expiration Date</b>	6 months from date of receipt.

---

**Biorbyt Ltd.**

7 Signet Court, Swann's Road,  
Cambridge, CB5 8LA, United Kingdom  
Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+44 \(0\) 1223 859-353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)

**Biorbyt LLC.**

68 TW Alexander Drive,  
Durham, NC, 27713, United States  
Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+1 \(415\) 906-5211](tel:+1(415)9065211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)