

**RPES8371**

---

## Product Information

<b>Product SKU:</b>	RPES8371	<b>Expression Host:</b>	Mammalian	<b>Size:</b>	20µg
<b>Tag:</b>	C-His	<b>Reactivity:</b>	Human	<b>Accession:</b>	P07585

---

## Additional Information

<b>Calculated MW:</b>	36.1 kDa	<b>Observed MW:</b>	45 kDa
<b>Sequence:</b>	Asp31-Lys359		

---

## Protein Information

**Background:** Decorin is a ubiquitous small cellular or pericellular matrix proteoglycan and is closely related in structure to biglycan protein. It belongs to the small leucine-rich proteoglycan (SLRP) family and consists of a core protein and a covalently linked glycosaminoglycan chain which is either chondroitin sulfate (CS) or dermatan sulfate (DS). As a component of connective tissue, decorin interacts with several extracellular matrix components, such as type I collagen and fibronectin, and plays a role in matrix assembly. Decorin resides in the tumor microenvironment and affects the biology of various types of cancer by downregulating the activity of several receptors involved in cell growth and survival. Decorin binds to and modulates the signaling of the epidermal growth factor receptor and other members of the ErbB family of receptor tyrosine kinases. It exerts its antitumor activity by a dual mechanism: via inhibition of these key receptors through their physical downregulation coupled with attenuation of their signaling, and by binding to and sequestering TGFbeta. Decorin also modulates the insulin-like growth factor receptor and the low-density lipoprotein receptor-related protein 1, which indirectly affects the TGFbeta receptor pathway. Decorin plays significant roles in tissue development and assembly, as well as playing both direct and indirect signaling roles.

**Synonyms:** PG-S, PG S, DKFZp686J, PGS, DCN, CSCD, DSPG2, PG40, PGII, PGS2, SLRR1B, decorin, DCN protein, Decorin proteoglycan, Dermatan sulphate proteoglycans II,

**Contact Details | Dublin, Ireland**

**Email:** [techsupport@assaygenie.com](mailto:techsupport@assaygenie.com) | **Web:** [www.assaygenie.com](http://www.assaygenie.com)

Copyright © 2024 Assay Genie Ltd, All Rights Reserved. All information / detail is correct at time of going to print.

DKFZp686J19238, DSPG 2, PG 40, PG II, PG S2, PGS 2, Proteoglycan core protein, Small leucine rich protein 1B, PG-S2, Bone proteoglycan II

**Endotoxin:** < 1.0 EU/mg of the protein as determined by the LAL method

**Formulation:** Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.

**Purity:** > 90% as determined by reducing SDS-PAGE.

**Bio-Activity:** Not validated for activity

**Storage:** Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Contact Details | Dublin, Ireland**

**Email:** [techsupport@assaygenie.com](mailto:techsupport@assaygenie.com) | **Web:** [www.assaygenie.com](http://www.assaygenie.com)

Copyright © 2024 Assay Genie Ltd, All Rights Reserved. All information / detail is correct at time of going to print.