HSP47 and the collagen synthesis pathway are one of many pathways under investigation at Bristol-Myers Squibb. Learn more about our work in fibrosis by visiting: www.bms.com/researchers-and-partners/areas-of-focus.html

**About HSP47**

Heat shock protein 47 (HSP47) is a molecular chaperone involved in the formation and stabilization of collagen molecules. Collagen is a structural protein that is found in skin and other connective tissues throughout the body. HSP47 guides the correct folding of the collagen protein and ensures it maintains the correct structure.¹,²


**HSP47 and Fibrosis**

- Fibrosis is a stage of scarring characterized by the accumulation of the protein collagen.
- Increased levels of HSP47 contribute to the production and accumulation of excessive amounts of collagen, which promotes the formation of fibrosis.²
- Elevated levels of HSP47 are observed in models of fibrosis and human fibrotic disease.¹,²

**Research Implications**

- Targeted downregulation of HSP47 in the liver can lead to improper folding of collagen within cells.
- Without proper folding, collagen clumps together inside of cells, decreasing the amount of collagen that is secreted outside of the cell.
- A decrease in the amount of secreted collagen may lead to a decrease in fibrosis.

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