

# 3<sup>rd</sup> Glycobiology World Congress

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### Glycosylated ribosomal protein S3, secreted from various cancer cells is a possible cancer biomarker

Ribosomal protein S3 (rpS3) is a genuine component of the 40S ribosomal small subunit. However, it has been known as a versatile protein with multiple other extra-ribosomal functions in apoptosis, cell cycle control, DNA repair, etc. It has a DNA repair endonuclease activity which is related with various cancers. Recently, we have discovered that this protein forms a dimer and is secreted after N-glycosylation. It is secreted only from various cancer cells but not in normal cells. We also have confirmed that rpS3 is secreted more into media when cancer cells are more invasive. The secretion pathway turned out to be a standard ER-Golgi dependent pathway. We are currently developing various antibodies against rpS3 which could be used as useful reagents for future cancer biomarkers.

### Biography

Joon Kim has completed his BS and MS from Seoul National University, PhD in Biochemistry from the University of California at Berkeley and Postdoctoral study from Harvard Medical School. He is a Professor in the Division of Life Sciences and Director of Radiation Safety and Management Center, Korea University, Seoul, Korea. He has published more than 160 papers in reputed journals.

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