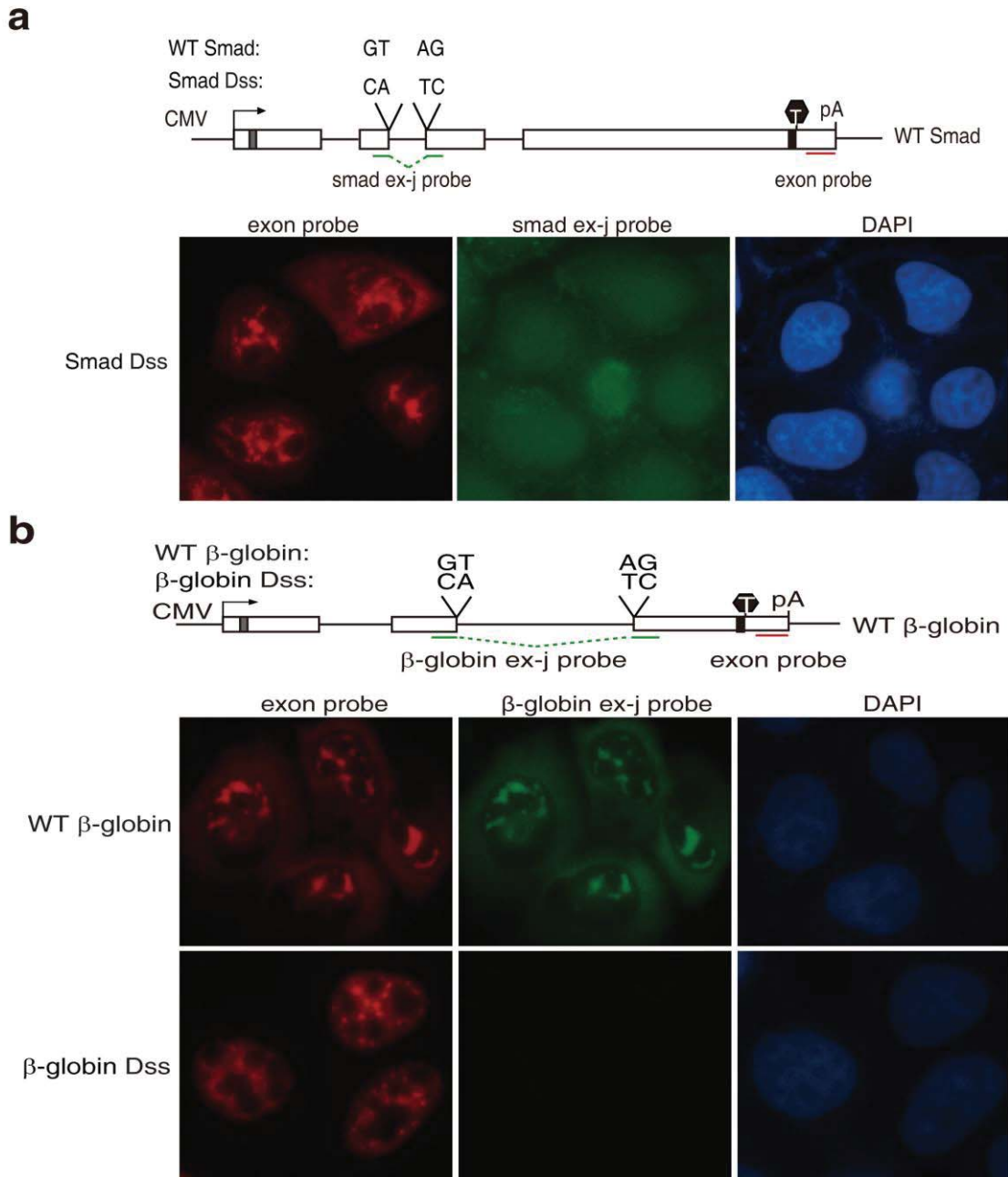


## Supplementary information



**Figure S1. Exon-exon Junction Probes detect spliced mRNA specifically.** (a)

Schematic of Smad constructs and probe location. The CMV promoter and BGH polyA sites and the location of the FISH probe (indicated by short line) are shown. The grey and black bars indicate Myc and HA tag respectively. The black triangle indicates stop

codon. The splice sites (GT and AG) are mutated to CA and TC for inhibition of splicing. Smad WT and Dss constructs (50 ng/ $\mu$ l) were microinjected into nuclei of HeLa cell, and  $\alpha$ -amanitin was added to block transcription 15 min after microinjection. FISH of was carried out with smad exon-exon junction (ex-j, green) probe and exon probe (red) by 1 hour. (b) Schematic of  $\beta$ -globin constructs and probe location. Same as (a), except that  $\beta$ -globin constructs were injected and FISH was carried out with  $\beta$ -globin ex-j probe and exon probe.