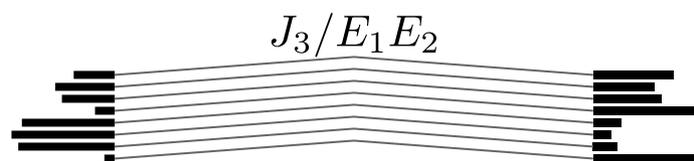


## Intron retention

5' — [exon] — [intron] — [exon] — 3'

Exclusion junction  
supporting reads



$$PIR_{ir} = \frac{J_1 + J_2}{J_1 + J_2 + 2 \times J_3}$$

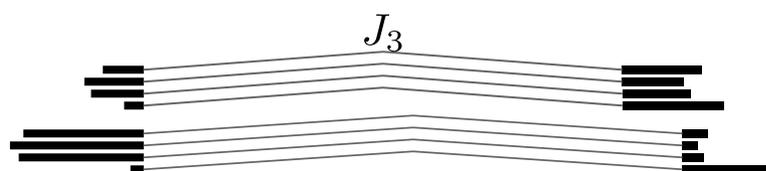
Inclusion intron flanking  
region supporting reads



## Alt. 5' splicing site

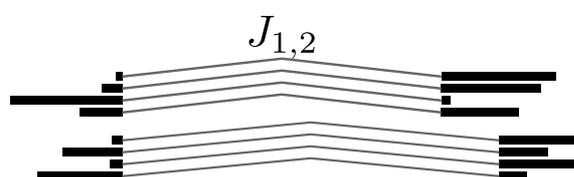
5' — [exon] — [exon] — [intron] — [exon] — 3'

Exclusion junction  
supporting reads



$$PSI_{alt.ss} = \frac{J_{1,2}}{J_{1,2} + J_3}$$

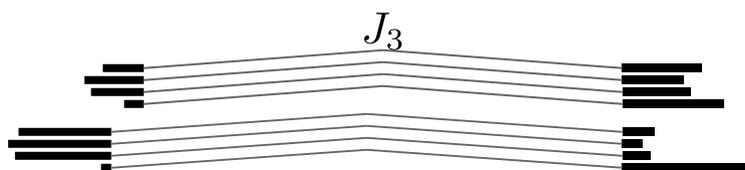
5' alternative splicing site  
junction supporting reads



## Alt. 3' splicing site

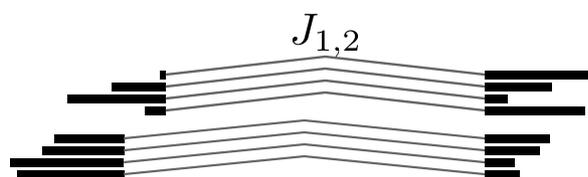
5' — [exon] — [intron] — [exon] — [exon] — 3'

Exclusion junction  
supporting reads



$$PSI_{alt.ss} = \frac{J_{1,2}}{J_{1,2} + J_3}$$

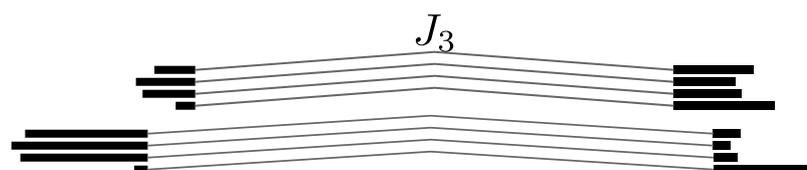
3' alternative splicing site  
junction supporting reads



## Exon skipping

5' — [exon] — [intron] — [exon] — [intron] — [exon] — 3'

Exclusion junction  
supporting reads



$$PSI_{ES} = \frac{J_1 + J_2}{J_1 + J_2 + 2 \times J_3}$$

Inclusion junctions  
supporting reads

