‘Don’t touch my junk DNA!’ says gene signal sequence

The following is an edited excerpt.

Almost all of the human genome is made of noncoding, or “junk” DNA, that is, DNA that usually doesn’t get copied and encoded into proteins.

To distinguish between junk and non-junk, transcription begins at regions on the DNA molecule called promoters, sequences located at the beginning of genes that are to be copied. RNA polymerase latches on to the promoter and starts unzipping the DNA double helix.

But how does the RNA polymerase know which direction to go? In the current issue of the scientific journal Nature, MIT biologists say they have discovered the mechanism that points transcription in the right direction.

Read the full story here: ‘Don’t touch my junk DNA!’ says gene signal sequence