

Is there a weight lifting strength gene and can it increase the effectiveness of steroids?

Researchers have isolated a genetic variant that has a strong correlation with success in power sports such as sprinting and weightlifting.

The ACTN3 gene encodes a protein called α -actinin-3, which is found within the fast-twitch fibers of muscle—a necessity for generating rapid, forceful contraction in activities such as sprinting and weightlifting.

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Many studies [involving small samples of Olympic-caliber athletes](#)...have found varying levels of performance enhancement, with a consensus emerging that the presence of 577R [a version of the ACTN3 gene] can [explain roughly two to three percent of the variance in strength and sport performance](#) among the general population.

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ACTN3 is only a tiny piece of the puzzle in terms of muscular development. A far greater mystery, [featured in](#) but one which scientists have repeatedly refused to explore, [on ethical grounds](#), is whether certain humans have a genetic predisposition to tolerate enormous doses of anabolic substances and other performance-enhancing drugs.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [When It Comes to Weightlifting, Genetics Can Do a Lot of the Heavy Lifting](#)

For more background on the Genetic Literacy Project, read [GLP on Wikipedia](#)