Tuberculosis-resistant cows developed using CRISPR gene editing by Chinese scientists

Tuberculosis has long been a problem for cattle farmers in developing countries, especially in Asia and Africa. Now, scientists from Northwest A&F University in Shaanxi, China have used a tweaked CRISPR/Cas9 gene-editing system to insert a protein that helps fight off the disease-causing bacteria….This is the first time gene editing has been used to confer tuberculosis resistance in cows, making the study a major breakthrough.

…

When the researchers infected the cows with Mycobacterium bovis, which causes tuberculosis, their genetically modified creations showed more resistance than the non-gene edited cows. The researchers published their results in the journal *Genome Biology*.

The authors cut the TB resistance-conferring gene, natural resistance-associated macrophage protein-1 or NRAMP1, from a line of mouse white blood cells that you can buy yourself online, and glued it into over a thousand cow embryos, which they transplanted into over four hundred cows. This resulted in 20 genetically modified cows, 11 that lived longer than three months.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: Scientists Make Mutant Cows That Are Resistant to a Devastating Disease