

Description

In 1991, a perfectly preserved mummified body was found emerging from the glacial ice of the Ötztal Alps, on the border between Austria and Italy. Frozen for over 5,300 years, he is Europe's oldest natural human mummy — a man who lived and died during the Copper Age, around 3300 B.C.E. Known as "Ötzi," he was approximately 160 centimeters tall (5'3") and weighed 50 kilograms (110 pounds). The circumstances of his death were solved forensically: an arrowhead embedded in his left shoulder confirms he was murdered. Genetic analysis of sample Oetzi has revealed an extraordinary level of biological detail about this ancient individual.



Facial reconstruction of Ötzi the Iceman at the South Tyrol Museum of Archaeology.

Image by Mannivu

Ötzi lived at a moment of significant technological and social transition in Europe. High levels of arsenic found in his hair suggest he was personally involved in the smelting of copper ores, which places him at the cutting edge of the metallurgical revolution reshaping his world. His genome shows a strong genetic affinity to modern Sardinian populations, making him a key reference point for understanding the settlement of prehistoric Europe and the ancestral populations that preceded the great demographic shifts of the Neolithic.

The details preserved in his body are exceptional. He carried a copper-bladed axe and a yew-wood bow. His body bore 61 tattoos: lines and crosses made of charcoal, likely applied for medicinal or therapeutic purposes, concentrated around joints and areas of physical stress. Analysis confirmed brown eyes, lactose intolerance, and a diet that included his final meals, still recoverable from his preserved stomach. The arrowhead in his shoulder indicates he was attacked — possibly ambushed — and died in the mountains. 5,000 years after he fell in the alpine snow, Ötzi remains one of the most detailed biological portraits we have of any individual from the ancient world.

Modern population	Distance
Sardinian	3.469
Corsican	7.853
Spanish (Andalusia)	8.768
Spanish (Canary Islands)	8.808
Spanish (Castilla la Mancha)	8.875
Spanish (Aragon)	8.876
Italian (Lombardy)	8.919
Spanish (Murcia)	8.971
Italian (Tuscany)	8.999
Italian (Lazio)	9.012

Source

Date: 789–546 BCE

Y-DNA: G-L166

mtDNA: K1f

Location: Italy

Research: High-coverage genome of the Tyrolean Iceman reveals unusually high Anatolian farmer ancestry

Sample(s): iceman.SG