Incomplete dominance vs codominance

Science, Biology

due: Introduction Incomplete dominance is the condition that one of the allele is not completely dominated by the other paired allele, while codominance is the condition where the both alleles of a gene are present (Jones 217). For incomplete dominance, heterozygous genes are involved while homozygous genes are involved in codominance. This paper discusses their differences and examples in details.

Differences

Codominance has both homozygous recessive and homozygous dominant. Homozygous recessive have a recessive characteristic that the offspring's phenotype has to have the features of both parents, while dominant homozygous result to phenotypes that produce a dominant characteristic from the parents. Contrary to that, incomplete dominance exhibits a phenotype that contains both the recessive and dominant character traits.

Examples

Incomplete dominance is clearly seen in the curliness of hair in the human body. This happens as a result of one parent having curly hair and the other having straight hair (Jones 226). Codominance is evident in the sickle cell anemia, a condition in human bodies of certain individuals. In this form, there is a change in red blood cells that is caused by proteins, altering its shape making it exhibit oxygen which makes it heterozygous.

Works Cited

Jones, S. The language of the genes: Biology, history and the evolutionary future. Hammersmith, London: HarperCollins Publishers, 1993. Print.