# Resource Summary Report

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## Local Ancestry in adMixed Populations

RRID:SCR_001258
Type: Tool

### Proper Citation

Local Ancestry in adMixed Populations (RRID:SCR_001258)

### Resource Information

**URL:** http://lamp.icsi.berkeley.edu/lamp/

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**Description:** A software package for the inference of locus-specific ancestry in recently admixed populations. LAMP-LD takes the genotypes of admixed individuals as well as reference haplotype panels approximating the mixing ancestral populations, and outputs the estimated number of alleles from each ancestry in each locus for each individual. The LAMP-LD package also includes the program LAMP-HAP, which processes haplotype data when high-quality phasing is available, and utilizes trio nuclear family designs to improve estimation accuracy. LAMP-LD is based on a window-based processing combined within a hierarchical Hidden Markov Model. It can process 2,3 or 5 mixing populations, and its short per-sample processing time makes it suitable for analyzing large datasets of dense SNP panels. The original program LAMP does not use the LD and therefore is not as accurate, but it is useful in cases where the SNP density is not high enough or when the ancestral haplotypes are unkown.

**Abbreviations:** LAMP

**Resource Type:** software resource

**Defining Citation:** PMID:22495753, PMID:19477991, PMID:18252211

**Keywords:** locus, ancestry, admixed, population, genotype, haplotype, allele

**Funding:** NSF 513599

**Availability:** Free for academic use, Non-commercial, License agreement, Registration required, Acknowledgement requested

**Resource Name:** Local Ancestry in adMixed Populations

**Resource ID:** SCR_001258

**Alternate IDs:** OMICS_02080

**Record Creation Time:** 20220129T080206+0000

**Record Last Update:** 20250410T064658+0000

## Ratings and Alerts

No rating or validation information has been found for Local Ancestry in adMixed Populations.

No alerts have been found for Local Ancestry in adMixed Populations.

## Data and Source Information

**Source:** SciCrunch Registry

## Usage and Citation Metrics

We found 8 mentions in open access literature.

**Listed below are recent publications.** The full list is available at FDI Lab - SciCrunch.org.

Passamonti MM, et al. (2021) The Quest for Genes Involved in Adaptation to Climate Change in Ruminant Livestock. Animals : an open access journal from MDPI, 11(10).

Yuan J, et al. (2018) Integrated Analysis of Genetic Ancestry and Genomic Alterations across Cancers. Cancer cell, 34(4), 549.

Mooney JA, et al. (2018) Understanding the Hidden Complexity of Latin American Population Isolates. American journal of human genetics, 103(5), 707.

Wang R, et al. (2015) The pathogenesis, detection, and prevention of Vibrio parahaemolyticus. Frontiers in microbiology, 6, 144.

Mersha TB, et al. (2015) Mapping asthma-associated variants in admixed populations. Frontiers in genetics, 6, 292.

Chornokur G, et al. (2015) Common Genetic Variation In Cellular Transport Genes and Epithelial Ovarian Cancer (EOC) Risk. PloS one, 10(6), e0128106.

Pasaniuc B, et al. (2009) Inference of locus-specific ancestry in closely related populations.

Bioinformatics (Oxford, England), 25(12), i213.

Sankararaman S, et al. (2008) Estimating local ancestry in admixed populations. American journal of human genetics, 82(2), 290.