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TDA-MIT: Mouse skin and lung tissue selection and collection V.1

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Protocol status: Working
We use this protocol and it's working

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Abstract

This protocol describes the collection of young and aged lung and skin tissues from p16-3MR mice (RRID: IMSR_JAX:037045) obtained from The Jackson Laboratory.

Safety warnings

This protocol requires prior approval by the users' Institutional Animal Care and Use Committee (IACUC) or equivalent ethics committee.

Sample collection

1 Collecting the young and aged mouse lung and skin tissues from p16-3MR mice (RRID: IMSR_JAX:037045) obtained from The Jackson Laboratory. Two age groups were used to represent physiologically mature and naturally aged cohorts: young mice (2–3 months) and old mice (24–26 months). Only clinically healthy animals without visible pathological signs were selected to avoid confounding disease-related effects.

2 Following euthanasia in accordance with institutional animal care guidelines, tissues were dissected under sterile and controlled conditions. Full-thickness dorsal trunk skin was excised from a consistent anatomical region to minimize spatial variability across samples. For lung collection, the thoracic cavity was opened, the lungs were removed, and peripheral tissue was dissected from the lower lobes while avoiding major airways to ensure comparable sampling across animals.

3 Immediately after dissection, tissues were embedded in OCT compound and snap-frozen without additional treatment, then stored at –80 °C until further processing.