

## SOP- Human Skin Biospecimen Procurement [TS/FEB-11]

### Method 1 – Longer term [24-72 hours] procurement of tissue biopsies under Hypothermic conditions

- a) Store 125 mL kit containers of AQIX® RS-I solution @ **3 – 8 °C** in dark conditions.
- b) Transport AQIX® RS-I kit container @ 0-4 °C (over ‘wet’ ice) to tissue retrieval site.
- c) Maintain AQIX® RS-I kit container @ 0-4 °C (over ‘wet’ ice) at tissue retrieval site under dark conditions.
- d) Open AQIX® RS-I kit container for the minimal time possible before inserting the 1cm x 1cm skin biopsy sample.
- e) Quickly attach the lid closure and seal the 125 mL bottle tightly.
- f) Transport back to laboratory @ 0-4 °C (over ‘wet’ ice) in a polystyrene, outer box.
- g) Conduct experiments immediately in laboratory using carbogenated AQIX® RS-I @ 37 °C, **or**,
- h) Store AQIX® RS-I kit container + specimen @ **3 – 8 °C** overnight under dark conditions prior to conducting the experiments the next day using carbogenated AQIX® RS-I @ 37 °C, **or**,
- i) Immediately process skin biopsy samples as one would fresh tissue using current proteomic, genomic, metabolomic and/or histochemical technologies.

### Method 2 – Shorter-term [6-12 hours] procurement of tissue biopsies under Ambient conditions

- a) Store 125 mL kit containers of AQIX® RS-I solution @ **15 - 25 °C** under dark conditions.
- b) Transport AQIX® RS-I kit container @ < 25 °C to tissue retrieval site.
- c) Maintain AQIX® RS-I kit container @ < 25 °C under dark conditions at tissue retrieval site.
- d) Open AQIX® RS-I kit container for the minimal time possible before inserting the 1cm x 1cm skin biopsy sample.
- e) Quickly attach the lid closure and seal the 125 mL bottle tightly.
- f) Transport back to laboratory @ < 25 °C in a polystyrene, outer box.
- g) Conduct experiments immediately in laboratory using carbogenated AQIX® RS-I @ 37 °C, **or**,
- h) Store AQIX® RS-I kit container + specimen @ **15 – 25 °C** overnight under dark conditions prior to conducting the experiments the next day using carbogenated AQIX® RS-I @ 37 °C, **or**,
- i) Immediately process skin biopsy samples as one would fresh tissue using current proteomic, genomic, metabolomic and/or histochemical technologies.

### Addendum

1. If tissue contamination becomes a problem then additional AQIX® RS-I solution may be needed to thoroughly rinse the skin biopsies before inserting into the 125 mL AQIX® RS-I solution specimen bottles. Additionally, 50-100 mg/L of Chloromycetin or 25-50 mg/L Nanomycopulitin may be added to AQIX® RS-I solution to prevent bacterial contamination without compromising the viability of the biopsy specimens.