

Androgen Insensitivity syndrome (AIS) OMIM: 300068
Gene: Androgen receptor (AR) Locus: Xq11-q12 OMIM: 313700

SERVICE: mutation and dosage analysis of the androgen receptor (AR) gene

TESTING: **Diagnostic*:** clinically affected patients with XY karyotype
Carrier: female relatives of clinically affected patients (known mutation)
*samples will only be accepted with a completed 'testing criteria' form (see attached)

REFERRALS: **Clinical Geneticists, Paediatric/Adult Endocrinologists, Gynaecologists**
The laboratory does NOT accept referrals directly from patients

TARGET REPORTING TIME AND COSTS

(Non UK National Health Service patients are subject to a surcharge. Payment must be agreed prior to testing – please include invoice form A)

Diagnostic:	8 weeks	£415 (sequencing)
		£175 (dosage)
Carrier:	2 weeks	£145

TECHNICAL INFORMATION

- PCR and fluorescent sequence analysis of exons 1-8 and splice site boundaries of the AR gene
 - Multiplex ligation dependent probe amplification analysis of exons 1-8 of the AR gene
- More than 95% of patients with complete androgen insensitivity (CAIS) and approximately 20% of patients with partial androgen insensitivity (PAIS) have point mutations in the androgen receptor (AR) gene.

SAMPLE REQUIREMENTS

- 1-5ml blood in EDTA or 50ul DNA (concentration ~500ng/ul)
- All patient samples must be labelled with **name, date of birth and Hospital/NHS number**
- Samples should be accompanied by a FULLY completed request card (available from the laboratory)
- Please include details of test, family history, patient address & postcode, GP, referring clinician and unit/hospital
- **Samples and paperwork must include three unique and matching patient identifiers**

SHIPPING DETAILS

- DNA can be sent by first class post
- Blood must be appropriately packaged and preferably sent by courier to arrive as soon as possible.
- Do not freeze prior or during postage.

CONSENT

It is the responsibility of the referring clinician to ensure consent has been obtained for:

- testing and storage
- the use of the sample and the information generated from it to be shared with members of the patients family and their health professionals

After testing, part of this sample might be used anonymously for the development of new tests and to monitor the quality of laboratory results.

CONTACT DETAILS

Genetics Laboratories, Box 143
Level 6, Addenbrooke's Treatment Centre
Addenbrooke's Hospital
Cambridge CB2 0QQ
Tel: +44 (0) 1223 348866
Fax: +44 (0) 1223 348870
Email: becky.treacy@addenbrookes.nhs.uk

Website: www.cuh.org.uk/genetics-labs



Accredited Medical Laboratory
Reference No: 1275

UKGTN testing criteria

Name of disease(s):	Androgen Insensitivity syndrome (AIS)
Name of gene(s):	Androgen receptor (AR)

Patient name:	Date of birth:
Patient postcode:	NHS number:
Name of referrer:	
Title/Position:	
Department/Hospital:	
Contact email/telephone number:	

Referrals will only be accepted from one of the following:
(Please indicate with a tick which category refers to the referrer)

Referrer	Tick if this refers to you
Consultant Clinical Geneticist	<input type="checkbox"/>
Consultant Paediatric Endocrinologist	<input type="checkbox"/>
Consultant Adult Endocrinologist	<input type="checkbox"/>
Consultant Gynaecologist	<input type="checkbox"/>

For information regarding AIS research studies or further interpretation of unclassified variants, please contact Prof Ieuan Hughes (Tel: 01223 336885; iah1000@medschl.cam.ac.uk)

Minimum criteria required for testing to be appropriate:

Criteria (all required)	Tick if this patient meets criteria
1. 46, XY karyotype AND	<input type="checkbox"/>
2. normal testosterone production AND	<input type="checkbox"/>
3. absent mullerian structures AND	<input type="checkbox"/>
4. female appearance or ambiguous genitalia with no other syndromic features	<input type="checkbox"/>

If the sample does not fulfil all the inclusion criteria and you still feel that testing should be performed please contact the molecular genetics laboratory