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## Lampiran 1

Kode isolat pada tabel 1 menunjukkan hasil identifikasi bakteri *E. coli* pada media *MacKonkey Agar* dan dilanjutkan pemeriksaan menggunakan metode DDST dan *vitek 2 compact* untuk menguji tingkat sensitifitas dan spesifitas tiap sampel dan hasil terlampir pada pengamatan tabel 1.

**Tabel 1.** Data sampel isolat *Escherichia coli* (N= 37) dengan pengujian sensitivitas menggunakan metode DDST dan *vitek 2 compact*

| NO | KODE SAMPEL | IDENTIFIKASI BAKTERI          | AST       |             |             |                           |                           |         |            |               |             |             |               |  |
|----|-------------|-------------------------------|-----------|-------------|-------------|---------------------------|---------------------------|---------|------------|---------------|-------------|-------------|---------------|--|
|    |             |                               | VITEK     |             |             | DDST                      |                           |         |            |               |             |             |               |  |
|    |             |                               | ESBL<br>L | C<br>A<br>Z | C<br>R<br>O | ESBL<br>(AMC<br>+<br>CAZ) | ESBL<br>(AMC<br>+<br>CRO) | AM<br>C | CAZ<br>CAZ | CAZ<br>(CLSI) | A<br>M<br>C | C<br>R<br>O | CRO<br>(CLSI) |  |
| 1  | 6           | <i>E.coli</i>                 | NEG       | S           | S           | NEG                       | NEG                       | 22      | 28         | S             | 18          | 22          | I             |  |
| 2  | 7           | <i>E.coli</i>                 | NEG       | S           | S           | NEG                       | NEG                       | 20      | 27         | S             | 18          | 28          | S             |  |
| 3  | 8           | <i>E.coli</i>                 | NEG       | S           | S           | NEG                       | NEG                       | 18      | 21         | S             | 20          | 20          | I             |  |
| 4  | 9           | K.pink, kering: <i>E.coli</i> | POS       | S           | R           | NEG                       | POS                       | 21      | 19         | I             | 20          | 10          | R             |  |
| 5  | 12          | <i>E.coli</i>                 | NEG       | S           | S           | NEG                       | NEG                       | 21      | 28         | S             | 21          | 28          | S             |  |
| 6  | 27          | <i>E.coli</i>                 | POS       | R           | R           | POS                       | NEG                       | 19      | 9          | R             | 20          | 7           | R             |  |
| 7  | 29          | <i>E.coli</i>                 | NEG       | S           | S           | NEG                       | NEG                       | 22      | 27         | S             | 24          | 28          | S             |  |
| 8  | 39          | K.kering: <i>E.coli</i>       | NEG       | S           | S           | NEG                       | NEG                       | 24      | 33         | S             | 25          | 33          | S             |  |
| 9  | 40          | <i>E.coli</i>                 | NEG       | S           | S           | NEG                       | NEG                       | 20      | 28         | S             | 21          | 30          | S             |  |
| 10 | 43          | (MAC)k.pink, F: <i>E.coli</i> | NEG       | S           | S           | NEG                       | NEG                       | 18      | 27         | S             | 18          | 27          | S             |  |

| 11 | 57  | (MAC) K.Kering, <i>E.coli</i> ;<br>(MAC) K. Mukoid, <i>K. Pnemoniae</i>                                   | NEG | S | S | NEG | NEG | 0  | 27 | S | 24 | 30 | S |  |
|----|-----|---|-----|---|---|-----|-----|----|----|---|----|----|---|--|
| 12 | 58  | (MAC) <i>Escherchia coli</i>  | NEG | S | S | NEG | NEG | 21 | 31 | S | 25 | 39 | S |  |
| 13 | 65  | (MAC) <i>Escherchia coli</i> ;<br>(MAC) K.Pink Mukoid,<br>NF  | NEG | S | S | NEG | NEG | 21 | 28 | S | 22 | 30 | S |  |
| 14 | 67  | (CA) <i>E. coli</i>   | NEG | S | S | NEG | NEG | 19 | 24 | S | 0  | 28 | S |  |
| 15 | 70  | (MAC) <i>Escherchia coli</i>  | NEG | S | S | NEG | NEG | 19 | 28 | S | 19 | 27 | S |  |
| 16 | 73  | (MAC) <i>Escherchia coli</i>  | POS | S | R | NEG | POS | 15 | 21 | S | 18 | 12 | R |  |
| 17 | 84  | (CHROM) K.Violet,<br><i>E.coli</i>  | POS | S | R | NEG | POS | 25 | 29 | S | 29 | 19 | R |  |
| 18 | 88  | (CHROM) K.Violet,<br><i>E.coli</i>  | NEG | S | S | NEG | NEG | 0  | 29 | S | 23 | 33 | S |  |
| 19 | 104 | (MAC) <i>k.pink</i> ,<br><i>Fermenter, kering: E. coli</i> , (MAC) <i>k.creamy</i> ,<br>NF, <i>kering</i> | NEG | S | S | NEG | NEG | 0  | 27 | S | 21 | 30 | S |  |
| 20 | 105 | (MAC) <i>k.pink</i> ,<br><i>Fermenter, kering:E. coli</i> , (MAC) <i>k.pink</i> , F,<br>perm.semimukoid   | NEG | S | S | NEG | NEG | 22 | 30 | S | 23 | 29 | S |  |
| 21 | 114 | (MAC) <i>k.pink</i> , F, <i>kering: E.coli</i> ,<br>(MAC) <i>k.pink</i> ,F, <i>mukoid</i>                 | NEG | S | S | NEG | NEG | 0  | 26 | S | 20 | 28 | S |  |
| 22 | 122 | (MAC) <i>E. coli</i>  | NEG | S | S | NEG | NEG | 0  | 25 | S | 21 | 28 | S |  |
| 23 | 123 | (MAC) <i>E. coli</i>  | NEG | S | S | NEG | NEG | 0  | 28 | S | 19 | 32 | S |  |

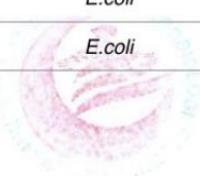
|    |     |   |     |   |   |     |     |    |    |   |    |    |   |
|----|-----|---|-----|---|---|-----|-----|----|----|---|----|----|---|
|    |     |   |     |   |   |     |     |    |    |   |    |    |   |
| 24 | 129 | (MAC) k.pink, F, kering:<br><i>E.coli</i> , (MAC)k.cream,<br>NF, mukoid       | NEG | S | S | NEG | NEG | 0  | 26 | S | 21 | 30 | S |
| 25 | 130 | (MAC) k.pink, F,<br>kering: <i>E. coli</i> ,<br>(MAC)k.pink,NF,semim<br>ukoid | NEG | S | S | NEG | NEG | 0  | 26 | S | 20 | 29 | S |
| 26 | 131 | (MAC) k.pink, F, kering:<br><i>E. coli</i> , (MAC)k.creamy,<br>NF,kering      | NEG | S | S | NEG | NEG | 0  | 27 | S | 24 | 30 | S |
| 27 | 134 | (CA) <i>K. violet E. coli</i> ,<br>(MAC)k.pink,<br>NF,mukoid                  | NEG | S | S | NEG | NEG | 0  | 27 | S | 21 | 29 | S |
| 28 | 135 | (CA) <i>K. violet E. coli</i>   | NEG | S | S | NEG | NEG | 0  | 28 | S | 21 | 31 | S |
| 29 | 139 | (CA) <i>E.coli</i>  | NEG | S | S | NEG | NEG | 0  | 29 | S | 20 | 33 | S |
| 30 | 144 | (MAC)k.pink,F,semimu<br>koid: <i>E. coli</i> ,<br>(MAC)k.pink,NF,mukoid       | NEG | S | S | NEG | NEG | 0  | 29 | S | 22 | 34 | S |
| 31 | 145 | (CA) <i>E. coli</i>   | NEG | S | S | NEG | NEG | 0  | 27 | S | 19 | 32 | S |
| 32 | 150 | (MAC)k.pink, F,kering:<br><i>E. coli</i> ,<br>(MAC)k.cream,NF,kerin<br>g      | NEG | S | S | NEG | NEG | 0  | 25 | S | 27 | 30 | S |
| 33 | 157 | (CHROM) K.Violet,<br><i>E.coli</i>  | NEG | S | S | NEG | NEG | 22 | 27 | S | 0  | 35 | S |
| 34 | 160 | (CHROM) K.Violet,<br><i>E.coli</i> ,  | NEG | S | S | NEG | NEG | 22 | 27 | S | 0  | 30 | S |

|    |     |   |     |   |   |     |     |    |    |   |   |    |
|----|-----|---|-----|---|---|-----|-----|----|----|---|---|----|
|    |     | (MAC)k.cream,NF,semi<br>mukoid  |     |   |   |     |     |    |    |   |   |    |
| 35 | 164 | Chrom(k.violet) <i>E.coli</i>   | NEG | S | S | NEG | NEG | 21 | 23 | S | 0 | 24 |
| 36 | 176 | (MAC) K.pink,F,kering:<br><i>Escherichia coli</i>                       | NEG | S | S | NEG | NEG | 13 | 25 | S | 0 | 39 |
| 37 | 177 | (MAC) k.pink, F, kering:<br><i>E.coli</i> , (MAC)k.cream,<br>NF, kering | NEG | S | S | NEG | NEG | 6  | 24 | S | 0 | 27 |

## LAMPIRAN 2

### Hasil Identifikasi pada Media MacConkey

| Kode sampel urine | Bentuk | Warna      | Tepi    | Permukaan   | Elevasi | Laktosa | Konfirmasi Uji Biokimia |
|-------------------|--------|------------|---------|-------------|---------|---------|-------------------------|
| 6                 | Bulat  | Merah muda | Regular | Semi mukoid | Cembung | +       | <i>E.coli</i>           |
| 7                 | Bulat  | Merah muda | Regular | Kering      | Cembung | +       | <i>E.coli</i>           |
| 8                 | Bulat  | Merah muda | Regular | Kering      | Cembung | +       | <i>E.coli</i>           |
| 9                 | TAP    |            |         |             |         |         | TAP                     |
| 9                 | Bulat  | Merah muda | Regular | Mukoid      | Cembung | +       | <i>K.pneumoniae</i>     |
| 12                | Bulat  | Merah muda | Regular | Semi mukoid | Cembung | +       | <i>E.coli</i>           |
| 14                | Bulat  | Merah muda | Regular | Semi mukoid | Cembung | +       | <i>E.cloacae</i>        |
| 15                | Bulat  | Cream      | Regular | Semi mukoid | Cembung | -       | <i>Sphingomonas sp.</i> |
| 18                | Bulat  | Merah muda | Regular | Mukoid      | Cembung | +       | <i>E.cloacae</i>        |
| 25                | Bulat  | Cream      | Regular | Semi mukoid | Cembung | -       | <i>Sphingomonas sp.</i> |
| 27                | Bulat  | Merah muda | Regular | Kering      | Cembung | +       | <i>E.coli</i>           |
| 29                | Bulat  | Merah muda | Regular | Kering      | Cembung | +       | <i>E.coli</i>           |
| 31                | Bulat  | Cream      | Regular | Mukoid      | Cembung | -       | <i>P.aeruginosa</i>     |
| 39                | Bulat  | Merah muda | Regular | Kering      | Cembung | +       | <i>E.coli</i>           |
| 39                | Bulat  | Merah muda | Regular | Mukoid      | Cembung | +       | <i>K.pneumoniae</i>     |
| 40                | Bulat  | Merah muda | Regular | Semi mukoid | Cembung | +       | <i>E.coli</i>           |
| 42                | Bulat  | Cream      | Regular | Semi mukoid | Cembung | -       | <i>Aeromonas sp.</i>    |
| 43                | Bulat  | Merah muda | Regular | Kering      | Cembung | +       | <i>E.coli</i>           |
| 43                | Bulat  | Cream      | Regular | Semi mukoid | Cembung | -       | <i>P.aeruginosa</i>     |
| 45                | Bulat  | Merah muda | Regular | Kering      | Cembung | +       | <i>E.hermannii</i>      |
| 54                | Bulat  | Merah muda | Regular | Mukoid      | Cembung | +       | <i>K.pneumoniae</i>     |
| 57                | Bulat  | Merah muda | Regular | Kering      | Cembung | +       | <i>E.coli</i>           |
| 57                | Bulat  | Merah muda | Regular | Mukoid      | Cembung | +       | <i>K.pneumoniae</i>     |
| 58                | Bulat  | Merah muda | Regular | Kering      | Cembung | +       | <i>E.coli</i>           |
| 65                | Bulat  | Merah muda | Regular | Kering      | Cembung | +       | <i>E.coli</i>           |
| 67                | Bulat  | Merah muda | Regular | Kering      | Cembung | +       | <i>E.coli</i>           |
| 70                | Bulat  | Merah muda | Regular | Kering      | Cembung | +       | <i>E.coli</i>           |



|     |       |            |         |                    |         |   |                        |
|-----|-------|------------|---------|--------------------|---------|---|------------------------|
| 73  | Bulat | Cream      | Regular | Semi mukoid        | Cembung | - | <i>E.coli</i>          |
| 84  | Bulat | Merah muda | Regular | Semi mukoid        | Cembung | + | <i>E.coli</i>          |
| 84  | Bulat | Cream      | Regular | Mukoid             | Cembung | - | <i>Cronobacter sp.</i> |
| 88  | TAP   |            |         |                    |         |   | TAP                    |
| 90  | Bulat | Merah muda | Regular | Mukoid             | Cembung | + | <i>K.pneumoniae</i>    |
| 97  | Bulat | Cream      | Regular | Semi mukoid        | Cembung | - | <i>E.cloacae</i>       |
| 104 | Bulat | Merah muda | Regular | Kering             | Cembung | + | <i>E.coli</i>          |
| 105 | Bulat | Merah muda | Regular | Kering             | Cembung | + | <i>E.coli</i>          |
| 114 | Bulat | Merah muda | Regular | Kering             | Cembung | + | <i>E.coli</i>          |
| 122 | Bulat | Merah muda | Regular | Kering             | Cembung | + | <i>E.coli</i>          |
| 123 | Bulat | Merah muda | Regular | Kering             | Cembung | + | <i>E.coli</i>          |
| 129 | Bulat | Merah muda | Regular | Kering             | Cembung | + | <i>E.coli</i>          |
| 130 | Bulat | Merah muda | Regular | Kering             | Cembung | + | <i>E.coli</i>          |
| 130 | Bulat | Cream      | Regular | Semi mukoid        | Cembung | - | <i>E.cloacae</i>       |
| 131 | Bulat | Merah muda | Regular | Kering             | Cembung | + | <i>E.coli</i>          |
| 134 | Bulat | Merah muda | Regular | Semi mukoid        | Cembung | + | <i>E.coli</i>          |
| 135 | Bulat | Merah muda | Regular | Kering             | Cembung | + | <i>E.coli</i>          |
| 139 | Bulat | Merah muda | Regular | Kering             | Cembung | + | <i>E.cloacae</i>       |
| 144 | Bulat | Merah muda | Regular | Semi mukoid-mukoid | Cembung | + | <i>E.coli</i>          |
| 145 | Bulat | Merah muda | Regular | Kering             | Cembung | + | <i>E.coli</i>          |
| 150 | Bulat | Merah muda | Regular | Semi mukoid-mukoid | Cembung | + | <i>E.coli</i>          |
| 157 | TAP   |            |         |                    |         |   | TAP                    |
| 157 | Bulat | Cream      | Regular | Kering             | Cembung | - | <i>P.aeruginosa</i>    |
| 160 | Bulat | Merah muda | Regular | Kering             | Cembung | + | <i>E.coli</i>          |
| 164 | Bulat | Merah muda | Regular | Kering             | Cembung | + | <i>E.coli</i>          |
| 164 | Bulat | Merah muda | Regular | Mukoid             | Cembung | + | <i>K.pneumoniae</i>    |
| 174 | Bulat | Merah muda | Regular | Mukoid             | Cembung | + | <i>K.pneumoniae</i>    |
| 176 | Bulat | Merah muda | Regular | Kering             | Cembung | + | <i>E.coli</i>          |
| 177 | Bulat | Merah muda | Regular | Kering             | Cembung | + | <i>E.coli</i>          |

TAP: Tidak Ada Pertumbuhan; *E. coli*: *Escherichia coli*; *K. pneumoniae*: *Klebsiella pneumoniae*; *E. cloacae*: *Enterobacter cloacae*; *P. aeruginosa*: *Pseudomonas aeruginosa*; *E. hermannii*: *Escherichia hermannii*

### LAMPIRAN 3

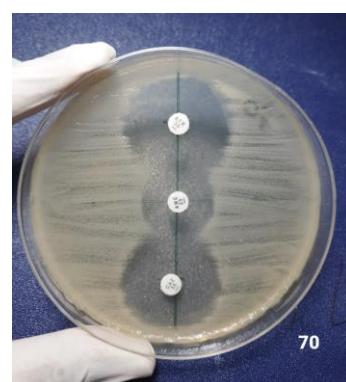
#### Pertumbuhan Koloni *Escherichia coli* pada media *Mac Conkey*



Keterangan gambar *Escherichia coli*: Koloni bulat, warna merah muda, tepi regular, permukaan kering, *lactose fermenter*.

#### Pertumbuhan koloni *Escherichia coli* pada metode DDST dan uji

#### sensitifitas antibiotik



Keterangan gambar hasil uji sensitivitas antibiotik dan konfirmasi ESBL metode DDST dengan penanaman disk antibiotik disekitar koloni dengan pengukuran diameter zona hambat *susceptible (S)*, *intermediate (I)*, dan *resistant (R)*.

## LAMPIRAN 4

KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET DAN TEKNOLOGI  
UNIVERSITAS HASANUDDIN FAKULTAS KEDOKTERAN



KOMITE ETIK PENELITIAN KESEHATAN

RSPTN UNIVERSITAS HASANUDDIN

RSUP Dr. WAHIDIN SUDIROHUSODO MAKASSAR

Sekretariat : Lantai 2 Gedung Laboratorium Terpadu

JL.PERINTIS KEMERDEKAAN KAMPUS TAMALANREA KM.10 MAKASSAR 90245.

Contact Person: dr. Agussalim Bukhari.,MMed,PhD, Sp.GK TELP. 081241850858, 0411 5780103, Fax : 0411-581431



### **REKOMENDASI PERSETUJUAN ETIK**

Nomor : 808/UN4.6.4.5.31/ PP36/ 2021

Tanggal: 22 Desember 2021

Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan Dengan Protokol berikut ini telah mendapatkan Persetujuan Etik :

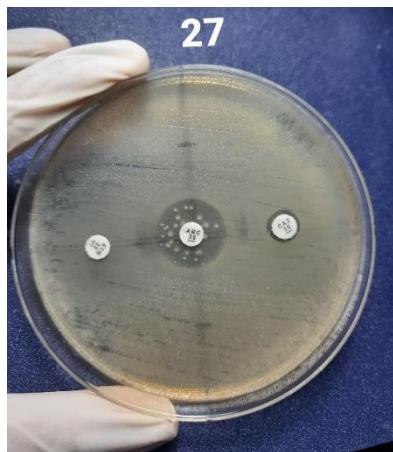
|                                    |   |  |                           |
|------------------------------------|---|--|---------------------------|
| No Protokol                        | UH21120760  | No Sponsor   |                           |
| Peneliti Utama                     | <b>dr. Ian Astarina</b>   | Sponsor  |                           |
| Judul Peneliti                     | UJI KONFIRMASI ESCHERICHIA COLI PENGHASIL ESBL PADA INFENSI SALURAN KEMIH IBU HAMIL MENGGUNAKAN DOUBLE DISK SYNERGY TEST DAN METODE AUTOMATIS |  |                           |
| No Versi Protokol                  | <b>1</b>  | Tanggal Versi  | <b>13 Desember 2021</b>   |
| No Versi PSP                       |   | Tanggal Versi  |                           |
| Tempat Penelitian                  | RS Universitas Hasanuddin Makassar  |  |                           |
| Jenis Review                       | <input checked="" type="checkbox"/> Exempted<br><input type="checkbox"/> Expedited<br><input type="checkbox"/> Fullboard Tanggal              | Masa Berlaku<br><b>22 Desember 2021</b><br>sampai<br><b>22 Desember 2022</b> | Frekuensi review lanjutan |
| Ketua KEPK FKUH RSUH dan RSWS      | Nama<br><b>Prof.Dr.dr. Suryani As'ad, M.Sc.,Sp.GK (K)</b>   | Tanda tangan   |                           |
| Sekretaris KEPK FKUH RSUH dan RSWS | Nama<br><b>dr. Agussalim Bukhari, M.Med.,Ph.D.,Sp.GK (K)</b>  | Tanda tangan   |                           |

Kewajiban Peneliti Utama:

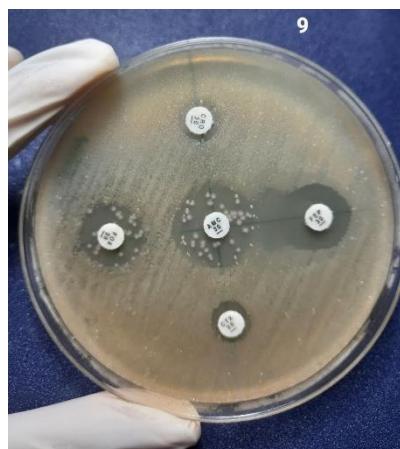
- Menyerahkan Amandemen Protokol untuk persetujuan sebelum di implementasikan
- Menyerahkan Laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan Lapor SUSAR dalam 72 Jam setelah Peneliti Utama menerima laporan
- Menyerahkan Laporan Kemajuan (progress report) setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendah
- Menyerahkan laporan akhir setelah Penelitian berakhir
- Melaporkan penyimpangan dari protokol yang disetujui (protocol deviation / violation)
- Mematuhi semua peraturan yang ditentukan

## LAMPIRAN 5

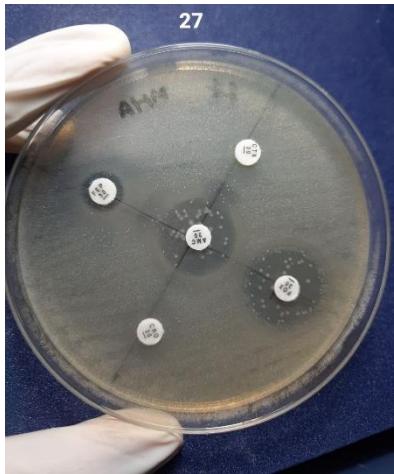
### Pertumbuhan koloni *Escherichia coli* pada metode DDST dan uji sensitifitas antibiotik



- Isolat kode sampel 27
- Antibiotik CAZ zona hambat 9mm dengan identifikasi *resistant*  $\leq$  17mm.
- Antibiotik AMC zona hambat 19mm.



- Isolat kode sampel 9
- Antibiotik CRO zona hambat 10mm dengan identifikasi *resistant*  $\leq$  19mm.
- Antibiotik AMC zona hambat 20mm.



- Isolat kode sampel 27
- Antibiotik CRO zona hambat 7mm dengan identifikasi *resistant* ≤ 19mm.
- Antibiotik AMC zona hambat 20mm.



- Isolat kode sampel 73
- Antibiotik CRO zona hambat 12mm dengan identifikasi *resistant* ≤ 19mm.
- Antibiotik AMC zona hambat 18mm.



- Isolat kode sampel 84
- Antibiotik CRO zona hambat 19mm dengan identifikasi *resistant* ≤ 19mm.
- Antibiotik AMC zona hambat 29mm.