**AGENT**
Lymphocytic choriomeningitis

**DATE**
10/30/46

**STRAIN**
WE

**HOST**
Guinea pig & mouse

**PREPARATION**
Virus carried in guinea pigs inoculated i.c. and i.d. strain or spleen, or both, are harvested as 10 or 20% suspensions for seed virus; spleen alone is taken for c.f. antigen. Guinea pigs develop fever in 2-4 days and die in 6-9 days. Tissue is taken for seed on 5th or 6th day.

<table>
<thead>
<tr>
<th>STOCK MATERIAL</th>
<th>DATE</th>
<th>TITER</th>
<th>INDIVIDUAL UNITS AVAILABLE</th>
<th>STORED*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guinea pig spleen #120 pass</td>
<td>25 Mar 46</td>
<td>i.c. in mice)</td>
<td>6 ampoules (2)</td>
<td>5°C walkin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fresh i.c. 7.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dried i.c. 5.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guinea pig brain &amp; spleen</td>
<td>28 July 47</td>
<td>Dried i.c. 4</td>
<td>40 ampoules (29)</td>
<td>5°C walkin</td>
</tr>
<tr>
<td>#125 pass</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guinea pig spleen #146</td>
<td>20 Feb 49</td>
<td>7.5</td>
<td>20 tubes (14)</td>
<td>-70°C Box 3</td>
</tr>
<tr>
<td>(rabbit serum)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ORIGINAL ISOLATION**
From patient

**REFERENCE**
Rivers & Scott, J.E.M., 1936, 63, 445

**OBTAINED FROM**

**MATERIAL**
9th pass. dried g.p. brain

**DATE**
9/25/42

**PASSAGE HISTORY**
Maintained from isolation to 1942 in Rivers laboratory by serial brain passage in g.p.; at AMDRGS since 1942 by brain passed i.c. in guinea pigs or spleen passed i.p. in guinea pigs. Strain was carried through 5 serial mouse brain passages in late 1942.

*NOTE: D - Dried; R - Refrigerator; F -20° and F-70° - Frozen; G - Glycerin*
IDENTIFICATION

One of original strains of LCM isolated from human beings, used as standard strain in Rivers laboratory, Hosp. Rock, Inst., and at AMDRGS from 1935 to present. Frequently mentioned in publications of research by Rivers and by Smadel and their coworkers from 1936 to 1943. Used at AMDRGS for preparation of diagnostic complement fixing antigen and in diagnostic neutralization tests for the Army since 1942.

Last identification by neutralization with known positive rabbit antiserum, 5/10/49.

REMARKS Strain is highly lethal for guinea pigs when inoculated by intracerebral, intraperitoneal and subcutaneous routes with practically all animals dying after receiving an infectious dose; this strain unsuited for immunizing guinea pigs. Guinea pig material is highly lethal for mice when given intracerebrally or intraperitoneally but irregularities in the titration results occur and should lead to a suspicion that the mouse colony is enzootically infected with LCM. Serial passage of virus in mouse brain usually gives seed virus titering $10^{-5}$ to $10^{-6}$. Diagnostic neutralization tests are routinely done at AMDRGS in mice inoculated intracerebrally.
**PREPARATION**

Maintained by serial passage in YS. Stored in 20% milk in rubber stoppered Wassermann tubes or lyophilized. Kills embryos in 3-5 days.

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>YS 13 Pass</td>
<td>25 May 46</td>
<td>Smear rick. ####</td>
<td>3 tubes</td>
<td>-70°C Box 2</td>
</tr>
<tr>
<td>YS 14 pass</td>
<td>24 June 46</td>
<td>Smear rick. ####</td>
<td>2 tubes</td>
<td>-70°C Box 2</td>
</tr>
<tr>
<td>YS 15 pass</td>
<td>18 Sept 47</td>
<td>Smear rick. ####</td>
<td>11 ampoules</td>
<td>5°C walkin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dried - viable 2 Dec 47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YS 17 pass</td>
<td>19 Dec 47</td>
<td>Smear rick. ####</td>
<td>3 tubes</td>
<td>-70°C Box 2</td>
</tr>
</tbody>
</table>

**ORIGINAL ISOLATION**

Blood of U.S.A. soldier in Italy - in guinea pigs

**REFERENCE**

Tobin, Rustigian, Snyder, & Smadel, Am. J. Hyg., 1946, 44, 51.

**OBTAINED FROM**


**MATERIAL**

Frozen YS, H-G-1

**DATE**

November 1945

**PASSAGE HISTORY**

Maintained for 6 passages in guinea pigs; maintained since at AMDRGS by YS passage.

**NOTE:**

D - Dried; R - Refrigerator; F-20° and F-70° - Frozen; G - Glycerin

**AMDRGS FORM 85**

15 June 1949
Guinea pigs immune to Henzerling resist infection with other Q fever strains (Topping, Shepard, Huebner, Am. J. Hyg., 1946, lvi, 173).

Comp. fix. antigen prepared from Henzerling YS fix complement with sera of human beings and guinea pigs infected with other strains of Q (Robbins et al., Am. J. Hyg., 1946, lvi, 51; Topping et al., ibid, page 173; Comm. on Acute Resp. Dis., ibid, page 110). Antigen from Henzerling strain better for diagnostic work than antigens prepared from number of other strains.

Vaccines prepared from Henzerling strain protect guinea pigs against infection with Henzerling and Dyer strain of R. burnetii and elicit specific c.f. antibodies in human beings (Smadel, Snyder & Robbins, Am. J. Hyg., 1948, li, 71).

REMARKS

Unpublished work (AMDRGS, 1948) indicates that c.f. diagnostic antigen prepared at Lederle Laboratories from Henzerling and Nine Mile strains are equally satisfactory for diagnosis of human infection with R. burnetii and are indistinguishable from those prepared and used at AMDRGS for routine diagnosis of Q fever in the Army.