

SOLE CARBON & ENERGY SOURCE TESTING

MEDIA-BASED ENZYME & GROWTH FACTOR TESTING

501 BIOCHEMICAL TESTING ARRAY

Ben strains=1
Able to grow on **benzene** as a sole carbon and energy source.

Tol strains=1
Able to grow on **toluene** as a sole carbon and energy source.

Eth strains=1
Able to grow on **ethylbenzene** as a sole carbon and energy source.

Xyl strains=1
Able to grow on **xylene** as a sole carbon and energy source.

Nap strains=4
Able to grow on **naphthalene** as a sole carbon and energy source.

Dies strains=3
Able to grow on **diesel fuel**.

Paraff strains=3
Able to grow on **paraffin**.

Lim strains=5
Able to grow on **limonene** as a sole carbon and energy source.

Cit strains=8
Able to grow on **citronellol** as a sole carbon and energy source.

Ger strains=8
Able to grow on **geraniol** as a sole carbon and energy source.

Phe strains=2
Able to grow on **phenol** as a sole carbon and energy source.



Pro strains=14
Produce **proteinase** enzymes that can reduce proteins to their amino acid components.

Star strains=13
Able to produce the enzyme **amylase** to reduce starch to its monosaccharide subunits.

Sier strains=6
Produce **lipase and esterase** enzymes to disassemble and degrade lipids.

Lip strains=4
Produce **lipase** enzymes that can separate lipids into their fatty acid subunits.

Phos strains=3
Demonstrates the ability to solubilize insoluble forms of **phosphate**.

IAA strains=1
Produces the hormone **indole acetic acid**.

Ligin strains=2
Able to produce **ligin modifying enzymes** to break down lignin into smaller subunits.

Cellu strains=16
Produce **cellulase** enzyme that can break down cellulose into its monosaccharide units.

Chitin strains=10
Produce **chitinase** enzyme that breaks down chitin into its n-acetyl glucosamine subunits.

N₂ strains=2
Identifies **diazotrophs** with the ability to fix atmospheric nitrogen into ammonia.

Ammon strains=15
Identifies ammonifying organisms that can release **ammonia** from organic molecules.

Urease strains=5
Produce the **urease** enzyme that breaks down urea into ammonia and CO₂.

ACC strains=4
Able to degrade **1-aminocyclopropane-1-carboxylic acid**, a precursor to ethylene formation which may have an impact on stress in plants.

ACE strains=10
Produces the volatile compound **acetoin** which has been implicated in enhanced plant growth and inducing systemic resistance in plants against pathogens.

K strains=2
Demonstrates the ability to solubilize insoluble forms of **potassium**.

Zn strains=2
Demonstrates the ability to solubilize insoluble forms of **zinc**.