

Enzymes, Immune System Activators, and Metabolites for Microbiome Research

Lytic enzymes

Genomics workflow requires microbial DNA extraction from complex samples. Our portfolio includes various lytic enzymes. To address challenges such as microbial DNA contamination in reagents and complex microbial samples, we introduced a suite of microbial DNA free reagents such as lytic enzymes and multilytic enzyme mix, which contains a combination of lytic enzymes.

Cat. No.	Product Description
MAC4L	MetaPolzyme - Multilytic Enzyme Mix
SAE0092	Mutanolysin from <i>Streptomyces globisporus</i> ATCC 21553 free of DNA contaminants, suitable for Microbiome research (DNA free)
SAE0091	Lysostaphin from <i>Staphylococcus staphylolyticus</i> free of DNA contaminants, suitable for Microbiome research (DNA free)
SAE0098	Lyticase from <i>Arthrobacter Luteus</i> free of DNA contaminants, suitable for Microbiome research (DNA free)

Microbiome immune system activators (LPS)

Microbial Lipopolysaccharides (LPS) are thought to be one of the most potent activators of innate immune signaling and an important mediator of microbiome's influence on host physiology. Bacteria LPSs stimulate cells of the innate immune system by the toll-like receptor 4 (TLR4), which recognizes common pathogen-associated molecular-patterns. A few recently launched examples from our LPS collection are shown here. For additional LPSs and different purity levels, visit our website.

Cat. No.	Product Description
SMB00704	LPS from <i>Proteus mirabilis</i> purified by phenol extraction
SMB00801	LPS from <i>Proteus vulgaris</i> purified by phenol extraction
SMB00610	LPS from <i>Porphyromonas gingivalis</i> purified by phenol extraction
SBR00027	LPS from <i>Akkermansia muciniphila</i> purified by phenol extraction *

Metabolites and libraries

It is well established that microbial communities affect each other and hosts by metabolism of various molecules and by various metabolites they are producing, such as short chain fatty acids. Our catalog offers a large selection of metabolites, standards, and metabolite libraries. A few examples are shown below. For additional metabolites and libraries, please visit our website.

Cat. No.	Product Description
LSMLS	Large Scale Metabolite Library
MSMLS	Mass Spectrometry Metabolite Library
BACSMLS	Bile Acid/Carnitine/Sterol Metabolite Library of Standards
OAMLS	Organic Acid Metabolite Library of Standards
FAMLS	Fatty Acid Metabolite Library of Standards
303410	Sodium butyrate
S7545	Sodium acetate
P1880	Sodium propionate
317594	Trimethylamine N-oxide (TMAO)
T0886	Triethylamine



To view more information about our products for microbiome research visit: SigmaAldrich.com/microbiome

