Gibberellic Acid A4 + A7
PRODUCT DATA SHEET

issue date 01/06/2020

Product Name:	Gibberellic Acid A4 + A7
Product Number:	G043
CAS Number:	468-44-0; 510-75-8
Molecular Formula:	A4: C19H24O5 A7: C19H22O5
Molecular Weight:	A4: 332.4 g/mol; A7: 330.38 g/mol
Form:	powder
Appearance:	white or off-white powder
Source:	Gibberella fujikuroi
Storage Conditions:	2-8 °C
Description:	Gibberellic acid A4 + A7 (supplied as a mixture) is an endogenous plant growth regulator involved with plant growth, germination, elongation, and flowering. Bioactive diterpenes biosynthesized through complex pathways, Gibberellins can control diverse aspects of plant growth and development. The majority of genes that encode Gibberellic Acid biosynthesis have been identified.
Mechanism of Action:	Gibberellins are highly expressed in embryos. During this stage, starch serves as the primary energy source and is subsequently degraded by gibberellin-induced activity.
Plant Biology Applications	Gibberellic Acid is used to promote cell division and cell elongation, seed germination and flowering in long-day plants (Raven et al., 1999). In addition to tissue culture applications, Gibberellic Acid is used in strawberry to control growth and flowering for out of season cropping (Paroussi et al., 2002).
Cancer Applications	The Gibberellin derivative 13-chlorine-3,15-dioxy-gibberellic acid methyl ester (GA-13315) had antitumor and antiangiogenic activity *in vitro* and *in vivo*. IC50 values were 0.13-30.28 ug/ml in 12 human tumor cell lines, and 14.2 ug/ml in peripheral blood mononuclear cells. The antiangiogenic activity (reduced chemotactic motility and capillary-like tube formation) contributed to its anticancer properties (Zhang et al, 2012).

References:

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