

**GLYUKOZAMINNING 6-NITRO-1,3-DIOKSI -8-KARBALDEGID BILAN SHIFF ASOSINI
SINTEZ QILISH. SINTEZ QILINGAN MODDALARNING BIOLOGIK FAOLLIKLARINI PASS
ONLINE TIZIMI YORDAMIDA O'RGANISH**

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Annotatsiya: Mazkur maqolada glyukozaminning 6-nitro-1,3-dioksi -8-karbaldegid bilan Shiff asosini sintezi va olingan moddalarning biologik faolliklarini PASS online tizimi yordamida o'rganish tahlil qilingan va yoritib berilgan.

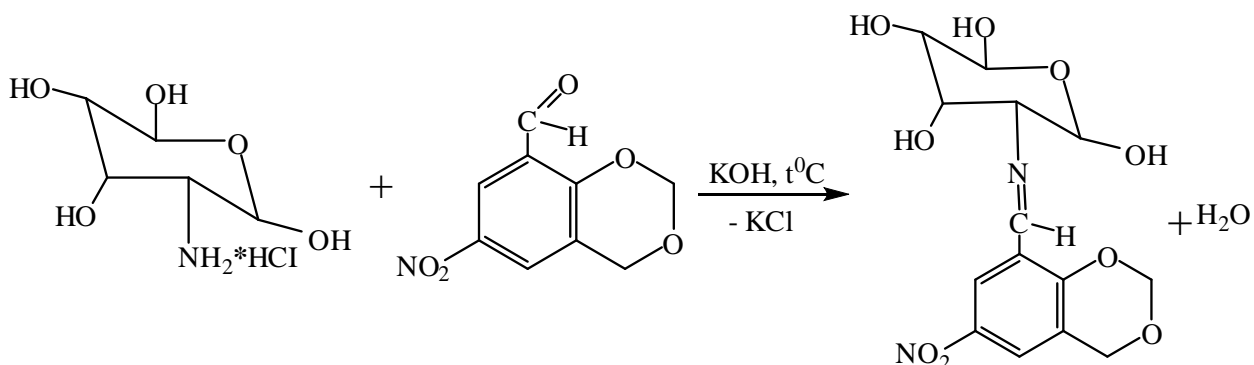
Annotation: In this article, the synthesis of the Schiff base of glucosamine with 6-nitro-1,3-dioxy-8-carbaldehyde and the study of the biological activities of the obtained substances using the PASS online system are analyzed and explained.

Kalit so'zlar: PASS online, biologik faollik, glyukozamin, yupqa qatlamli xromotografiya, IQ spektri.

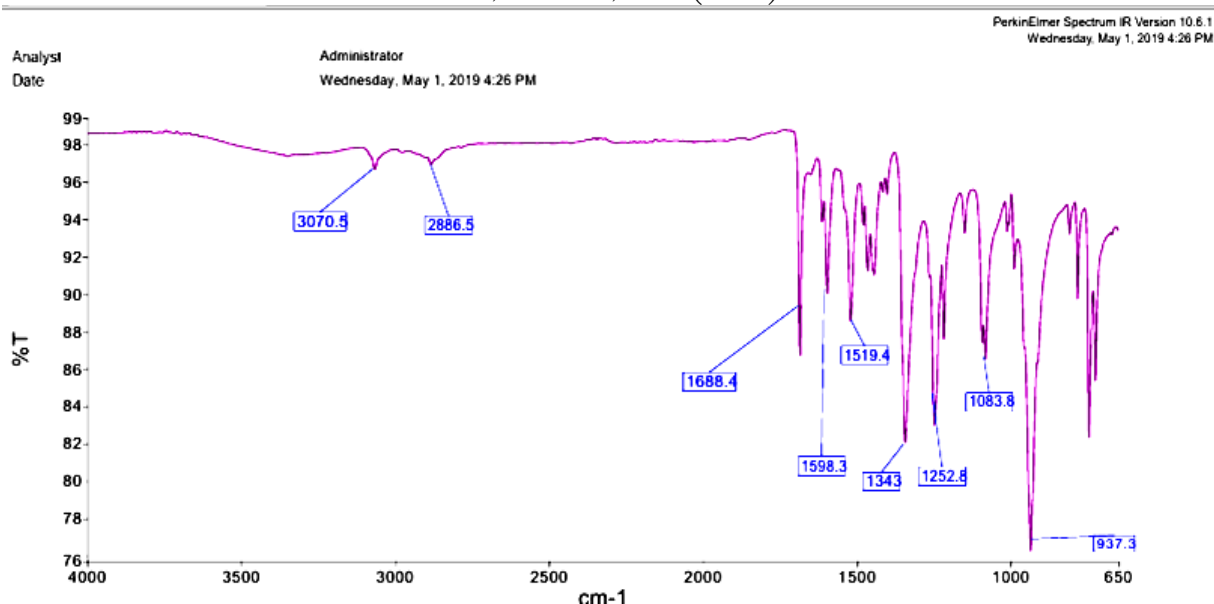
NATIJARLAR

Ishni Glyukozamin gidroxloridini distillangan suvda eritib olishdan boshlaymiz. Unga 1:1 mol nisbatda etil spirtida eritilgan 6-nitro-1,3-dioksi-8-karbaldegid moddasidan qo'shib, hosil bo'lgan eritma magnitli aralashtirgichda 2 soat davomida 65-75° C da qizdirildi. Mazkur jarayon ishqoriy muhitda olib borildi. Har 25-35 minut oraliq vaqtda yupqa qatlamli xromotografiyadan foydalanib reaksiya borayotganligini aniqlab turildi. YuQX uchun faqat Silifol-UV-254 (KAVALER Chexeslovakiya) plastinkalaridan foydalanildi. Reaksiya to'liq borganidan so'ng olingan modda to'liq cho'kishi uchun ma'lum muddat tindirib qo'yildi. So'ng qo'ng'ir cho'kma filtrlandi va quritildi.

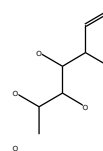
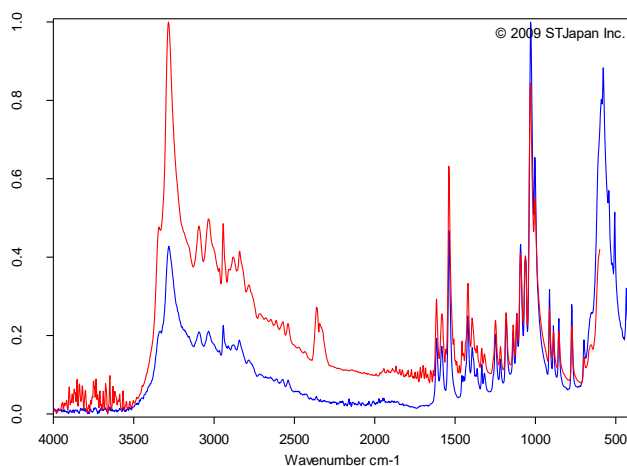
Jarayon quyidagi reaksiya tenglamasi orqali ifodalanadi:



Quyida olingan Shiff asosining IQ spektri keltirilgan. Bu spektr glyukozamin gidroxlorid spektri bilan taqqoslanadi:



1-rasm. Glyukozamin gidroksloridining 6-nitro-1,3-dioksi -8-karbaldegid bilan olingan Schiff asosining spektri.



Compound Name	D-GLUCOSAMINE HYDROCHLORIDE
Molecular Formula	C ₆ H ₁₃ NO ₅ HCl
Molecular Weight	215.6
CAS Registry Number	66-84-2
Other Name(s)	2AMINO-2-DEOXY-D-GLUCOSE HYDROCH
Melting Point	190 C
Sample Preparation	ATR single bounce
Reference	J02535/ A08264
Copyright	(c) 2012 STJapan Inc.
Заняць No.	6306

Color	Hit Quality	Compound name	CAS Number	Molecular formula	Molecular weight
	867	D-GLUCOSAMINE HYDROCHLORIDE	66-84-2	C ₆ H ₁₃ NO ₅ HCl	215.6

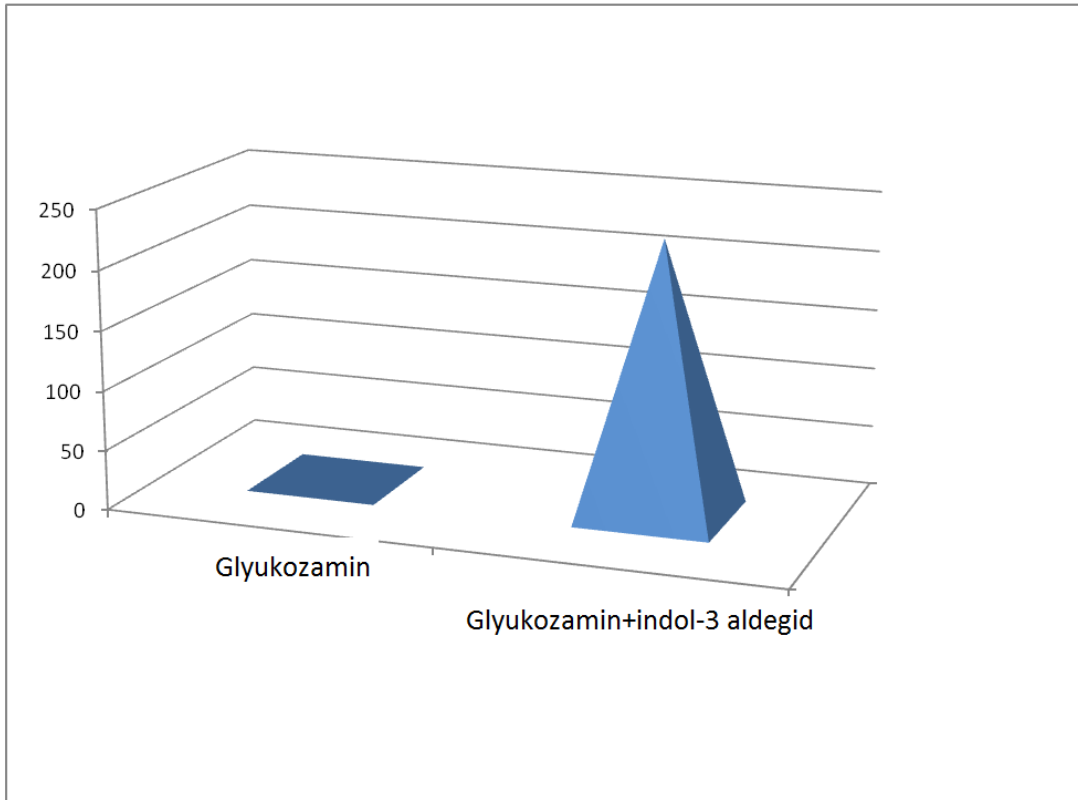
2-rasm. Glyukozamin gidrokslorid moddasining spektri (Taqqoslash uchun).

Yuqorida keltirilgan Schiff asosining IQ spektri glyukozamin gidrokslorid spektri bilan taqqoslanganda $1700-3700\text{ cm}^{-1}$ sohalardagi sezilarli darajadagi o'zgarish va 1688 cm^{-1} soxada yuzaga kelgan yutilish signali hosil bo'lgan azometin bog' hisobiga yuz bergan. Shuningdek, $650-1700\text{ cm}^{-1}$ sohalarda yuzaga kelgan yutilish signallaridagi o'zgarishlar, reaksiya sodir bo'lganligidan dalolat beradi.

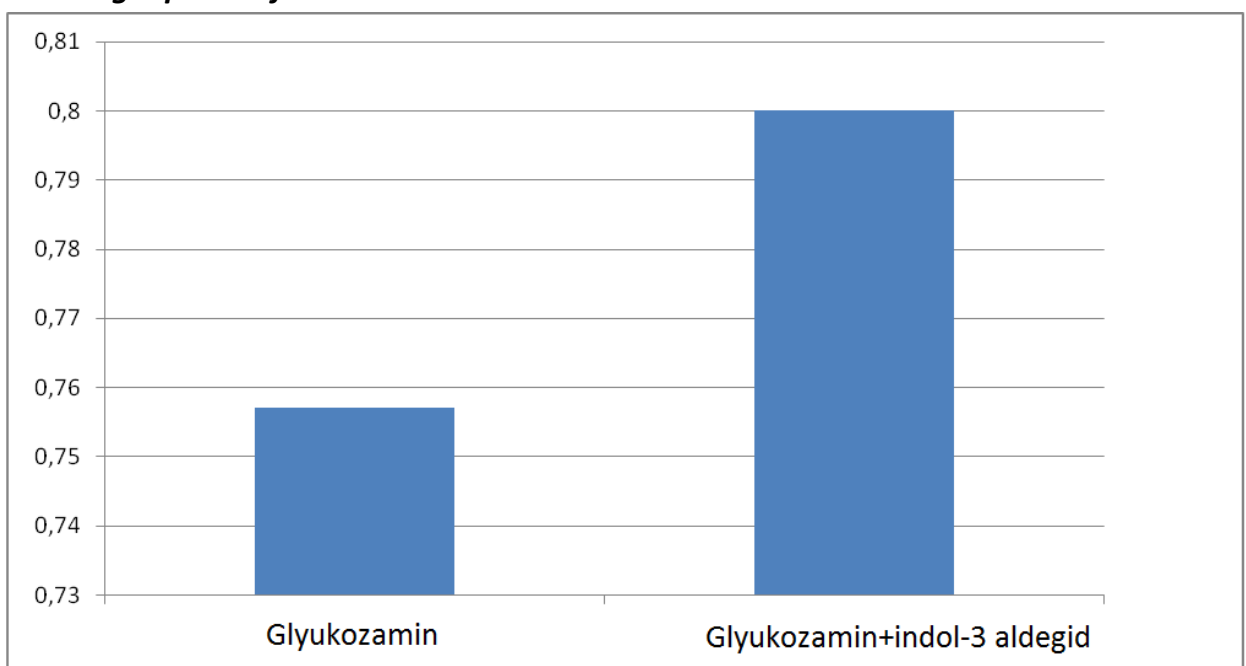
SINTEZ QILINGAN MODDALARNING BIOLOGIK FAOLLIKLARINI PASS ONLINE TIZIMI YORDAMIDA O'RGANISH

Olingan moddalarning biologik faolliklari haqida birlamchi ma'lumotga ega bo'lish uchun PASS ONLINE dasturida biologik faolliklari o'rganildi.

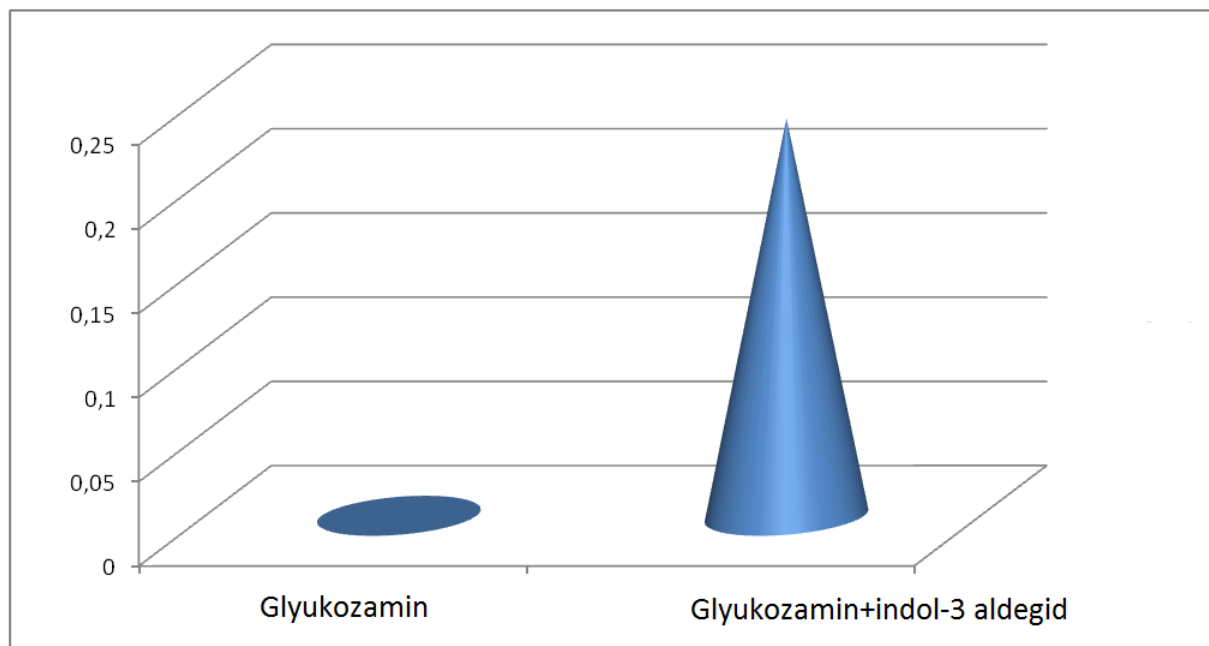
Glyukozaminning indol 3-aldegid bilan hosil qilingan Schiff asosining biologik faolliklarini kompyuter modellash orqali PASS analiz yordamida hujayraning qarishiga, herpes virusiga, oq qon kasalligiga qarshi, havfli yo'g'on ichak saratoni, prostata saratoni, ko'krak bezi saratoni, muskullarning destruksiyasi, infeksiyalarga qarshi xossalarning taxminiy faolliklari aniqlandi. Bunda quyidagi natijalar olindi. Quyida olingan moddalarning biologik faolliklarini ko'rsatuvchi PASS online dasturidan olingan ko'rsatkichlar ilova qilinadi:



3-rasm. Glyukozamin va glyukozaminning indol 3-aldegid bilan Schiff asosining herpes virusiga qarshm faolliklari.



4-rasm. Glyukozamin va glyukozaminning indol 3-aldegid bilan Shiff asosining infeksiyaga qarshi faolliklari.



5-rasm. Glyukozamin asosining oq qon kasalligiga qarshi faolliklari va glyukozaminning indol 3-aldegid bilan Shiff asosi.

XULOSA

Xitinning deatsetillanish maxsuloti aminopolisaxarid-xitozandan glikozamin gidrokslorid sintez qilindi. Ajratib olingan glukozamin gidroksloridiga 6-nitro-1,3-dioksi-8-karbaldegid moddasidan qo'shib Shiff asosi sintez qilindi. Olingan namunalar IQ spektri orqali tekshirildi va o'zgarishlar tahlil qilindi. Ajratib olingan moddalarning biologik faolliklarini PASS online tizimi yordamida o'rganildi. Olingan Shiff asosi hujayraning qarishiga, herpes virusiga, oq qon kasalligiga qarshi, havfli yo'g'on ichak saratoni, prostata saratoni, ko'krak bezi saratoni, muskullarning destruksiyasi, infeksiyalarga qarshi xossalarning taxminiy faolliklari aniqlandi.

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